

13.6 Metro West JDAP Application – (Lot 564) No. 101 Monash Avenue, Nedlands – 5 Storey Medical Consulting Centre

Council	25 September 2018
Applicant	Element
Landowner	Ramsay Hospital Holdings Pty Ltd
Director	Peter Mickleson – Director Planning & Development
Reference	DA18/29816 DAP/18/01457
Previous Item	Nil.
Attachments	1. Responsible Authority Report and attachments

Councillor Hassell – Impartiality Interest

Councillor Hassell disclosed that his super fund holds shares in Ramsay Health Care, and as a consequence, there may be a perception that his impartiality on the matter may be affected. Councillor Hassell declared that he would consider this matter on its merits and vote accordingly.

Councillor Wetherall – Impartiality Interest

Councillor Wetherall disclosed that his super fund may contain shares in Ramsay Health Care, and as a consequence, there may be a perception that his impartiality on the matter may be affected. Councillor Wetherall declared that he would consider this matter on its merits and vote accordingly.

Regulation 11(da) – Council did not support the RAR due to traffic and parking issues.

Moved – Councillor Hassell

Seconded – Councillor Wetherall

Council Resolution

Council recommends to the Metropolitan West Joint Development Assessment Panel that the application (reference DAP/18/01457) for a 5 Storey Medical Consulting Centre at (Lot 564) No. 101 Monash Avenue, Nedlands, be considered for approval but that:

- 1. The Council vehemently disagrees with the parking cap applied by the WAPC because of the adverse impact on the local residential areas;**
- 2. The traffic studies that pre-dated the Perth Children’s Hospital coming onstream is clearly inadequate;**
- 3. Council does not endorse the terms of the Responsible Authority Report as presented; and**

- 4. Council also makes the following comments:**
- a. Monash Avenue should be reviewed in regard to roads, footpaths, bike paths, car parking, speed limits;**
 - b. Council is concerned about the over concentration of Health Facilities in the area; and**
 - c. Hollywood Hospital Master Plan to give priority to including greater emphasis on the provision of quality food for site visitors (kiosks and vending machines are completely inadequate.)**

Councillor James left the room at 10.17 pm and returned at 10.20 pm.

CARRIED UNANIMOUSLY 10/-

Recommendation to Council

Council recommends to the Metropolitan West Joint Development Assessment Panel that the application (reference DAP/18/01457) for a 5 Storey Medical Consulting Centre at (Lot 564) No. 101 Monash Avenue, Nedlands, be approved subject to the conditions and advice notes contained in the Responsible Authority Report (dated 21 September 2018).

1.0 Executive Summary

In accordance with the Planning and Development (Development Assessment Panels) Regulations 2011, Administration is required to provide a Responsible Authority Report (RAR) to the Joint Development Assessment Panel (JDAP). Council views can also be submitted as a separate submission. The purpose of this report is to obtain Council's submission.

The development consists of a five-storey consulting/medical centre which includes the following:

- Demolition of two existing ward buildings and a day rehabilitation facility building.
- Ground floor Radiology and Radiology Oncology Centres;
- Uncovered car parking Covered car parking at the Ground floor and two levels above;
- 33 consulting suites;
- Relocation of some Hospital Services and space for yet to be determined Hospital Services; and

- Relocation of a boiler room which is adjacent to the western side boundary within the existing building footprint of the administration and training building.

The development is located centrally to the site closer towards the eastern side of the property. There are no new access points proposed to Verdun Street. The RAR outlines the proposal in detail (see attachment 1)



Form 1 – Responsible Authority Report

(Regulation 12)

Property Location:	Lot 564, No. 101 Monash Avenue, Nedlands
Development Description:	Hollywood Hospital Consulting Centre
DAP Name:	Metro West Joint Development Assessment Panel
Applicant:	Element
Owner:	Ramsay Hospital Holdings Pty Ltd
Value of Development:	\$32 million
LG Reference:	DA18/29816
Responsible Authority:	City of Nedlands
Authorising Officer:	Peter Mickleson – Director Planning and Development
DAP File No:	DAP/18/01457
Report Due Date:	21 September 2018
Application Received Date:	09 July 2018
Application Process Days:	90 Days
Attachment(s):	<ol style="list-style-type: none"> 1. Aerial Image 2. Feature Survey Plans 3. Development Plans and Elevations (Plans SD.00, SD.01, SD.02, SD.03, SD.04, SD.05, SD.06, SD.07, SD.08, SD.09, SD.10, SD.11, SD.12, SD.15 and SD.16) 4. Referral agency comment (DoT, DoE, DPLH Central team, DPLH IPAC) 5. Applicant Report 6. Hollywood Private Hospital Masterplan 7. Revised Traffic Impact Assessment & Revised submission for car parking calculation 8. CoN Traffic Consultant initial review and response from applicant’s Traffic Consultant 9. Municipal Inventory Listing 10. Concept landscaping Plan 11. City’s response to submissions 12. Applicant’s response to submissions 13. Preliminary feedback regarding preparation of LDP 14. City of Nedlands Council Minutes – 25 September 2018

Officer Recommendation:

That the Metropolitan West JDAP resolves to:

1. **Approve** DAP Application reference DAP/18/01457 and accompanying plans numbered SD.01, SD.02, SD.03, SD.04, SD.05, SD.06, SD.07, SD.08, SD.09, SD.10, SD.11, SD.12, SD.15 and SD.16 dated 06 July 2018 and 17 August 2018 in accordance with Clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and the provisions of the City of Nedlands Town Planning Scheme No. 2, subject to the following conditions as follows:

Conditions

1. This decision constitutes planning approval only and is valid for a period of two years from the date of approval. If the subject development is not substantially commenced within the two-year period, the approval shall lapse and be of no further effect.
2. The development shall always comply with the application and the approved plans, subject to any modifications required as a consequence of any condition(s) of this approval.
3. The proposed use complying with the Medical Centre and Hospital land use definitions stipulated under the City's Town Planning Scheme No. 2.
4. The applicant shall provide a revised plan demonstrating that a separate bicycle parking area adjacent to the proposed end of trip facility be provided, which is enclosed and secure provided for staff only to the satisfaction of the City.
5. The applicant shall provide a revised plan including the provision of a minimum of an additional 5 bicycle parking spaces for visitors provided in a location near to the pedestrian entry to the building, to the satisfaction of the City.
6. The proposed car parking and access areas shall be sealed, drained, paved and line marked in accordance with the approved plans and are to comply with the requirements of AS2890.1 prior to the occupation or use of the development.
7. The existing vehicle access to Verdun Street shall be maintained for staff and service vehicles only. Signage is to be provided/maintained adjacent to Verdun Street to direct traffic accordingly to the satisfaction of the City
8. The applicant shall provide a revised landscaping plan for the curtilage of the development and the new uncovered car parking areas which shall be prepared to the City's satisfaction and be consistent with the provisions of the Hollywood Private Hospital Masterplan. The landscaping plan shall include species listed within the Masterplan, densities and maturity of the landscaping, show one tree per four car parking bays, and details of the hard landscaping proposed. The landscaping plan shall be submitted by the applicant and approved by the City prior to construction commencing.
9. The landscaping proposed shall be planted in accordance with the approved landscaping plans prior to practical completion of the development and maintained thereafter by the landowners to the City's satisfaction.
10. A rubbish bin enclosure shall be provided for the proposed building with detailed provided upon application for building permit. The enclosure is to be constructed as per the following requirements:
 - Fitted with a self-closing gate;
 - Smooth and impervious floor not less than 75mm thick and evenly graded to an approved liquid refuse disposal system;
 - Easily accessible to allow for the removal of the receptacles;
 - Provided with a tap connected to an adequate supply of water and hose;
 - Adequate size for the volume of waste to facilitate storage, collection and cleaning of receptacles;
 - Designed to prevent the emission of odour outside the bin enclosure.
11. Prior to the occupation of the development or lodgement of any subsequent development application – whichever occurs first, a Parking Management Plan shall be prepared and

implemented at the applicant/landowner's expense to the satisfaction of the City on the advice of the Department of Transport (DoT).

12. Prior to the occupation of the development, a Travel Behaviour Change Plan is to be prepared and implemented to the satisfaction of the City on the advice of the Department of Transport (DoT).
13. Signage shall be provided internal to the subject site to the satisfaction of the City which will appropriately direct pedestrian and vehicle movements to and from the building.
14. Prior to the approval of a demolition permit a photographic record of the buildings being removed shall be created for Municipal Inventory records.
15. The applicant is required to engage an appropriately qualified acoustic consultant (such as a member of the Australian Acoustical Society or the Association of Australian Acoustical Consultants) to undertake a detailed noise assessment in relation to the Environmental Protection (Noise) Regulations 1997 to the satisfaction of the City prior to the commencement of development. Where such an assessment finds the proposal fails to meet the legislative limits the proponent must submit a noise mitigation plan for approval of the City prior to commencement of the development.
16. A Loading, Servicing and Delivery Management Plan shall be provided to the City prior to construction commencing and will outline how the servicing of the proposed building will minimise impacts to both the Monash Avenue and Verdun Street frontages including service, delivery and rubbish collection vehicle impact to Verdun Street and Monash Avenue.
17. A Construction and Noise Management Plan shall be submitted to and approved by the City prior to the lodgement of a building permit and complied with throughout the construction period to the City's satisfaction.
18. A Nature Strip Development application to be lodged and approved by the City prior to the lodgement of a building permit for the following works:
 - The crossover at Access 6 (Verdun Street) shall be redesigned for entry and exit at 90 degrees which may also require slight relocation to avoid nearby intersections.
 - A temporary wider crossover to Verdun street designed to accommodate access to the property for larger vehicles.
19. Prior to commencement of construction a report being provided to the City indicating the sustainable design features to be incorporated in the building as generally outlined by the Hollywood Private Hospital Masterplan. Within 6 months of occupation of the building a report being submitted to the City certifying installation of the approved sustainable design features and their benefits.
20. In accordance with the Hollywood Private Hospital Masterplan, the development shall include the following safety and security features and are to be installed prior to occupation of the development where practicable:
 - Opportunities for passive surveillance through building and open space design;
 - Installation and monitoring of a CCTV security system site wide;
 - Electronic control of all key access points;
 - Lighting to be designed to illuminate all pedestrian and vehicle paths, roads and corridors;
 - Avoidance of obstacles and landscaping which may impede visual control of public areas through sensitive design cognisant of design to prevent crime and improve individual safety on the campus; and

- Vandal proof material selection and treatments.
21. All stormwater from the development, which includes permeable and non-permeable areas shall be contained onsite to the satisfaction of the City.
 22. Prior to the commencement of development, measures shall be undertaken to ensure that the identification, and protection or replacement of any vegetation on the site within the area immediately abutting the development site worthy of retention that is not impact by the development works is undertaken.

Advice Notes

1. The City will not support any future development pursuant to its new Scheme 3 without the preparation and adoption of a Local Development Plan.
2. The applicant and landowner are advised that the use Medical Centre and Hospital are defined as being the following land use under Town Planning Scheme No. 2:

“Medical Centre - means a building (other than a hospital or private hospital) that contains or is designed or intended to contain facilities for use not only by practitioners as specified under the definition of consulting rooms but also for ancillary services such as chemists, pathologists, radiologist and allied health professionals”.

“Hospital – means any building, whether permanent or otherwise in which persons are received and lodged for medical treatment or care and (without limiting the generality of the foregoing) including “C” class hospitals and convalescent homes.”

3. The DoT has advised that Hollywood Private Hospital (HPH) has committed to implement a comprehensive paid parking system from January 1st, 2019. It is the DoT’s expectation that staff parking charges to HPH will match the QEII Medical Centre’s staff parking charges within 3 years.
4. In relation to condition no. 17, the Construction Management Plan is required to address the following:
 - Staging plan for the entire works;
 - Applicable timeframes and assigned responsibilities for tasks;
 - Onsite storage of materials and equipment;
 - Public safety, amenity and site security;
 - Contact details of essential site personnel;
 - Construction operating hours;
 - Noise control and vibration management;
 - Air management;
 - Details of how dust will be suppressed;
 - Details of how dust and sand drift will be controlled in the event that the landscape remains bare for any period of time after demolition;
 - Stormwater and sediment control;
 - Waste management;
 - Traffic and access management detailing all larger vehicles utilising access from Verdun street accessing the property from the eastern direction only or other method approved by the City and wider temporary crossover provided during the construction process;
 - Parking arrangements for contractors and subcontractors;
 - Site signage showing the builder’s direct contact details (telephone number and email address);
 - Management of noise in accordance with the requirements of the Environmental Protection (Noise) Regulations 1997;

- Details of and reasons for construction work on the construction site that is likely to be carried out other than between 7.00 am and 7.00 pm on any day which is not a Sunday or public holiday;
 - Details of and duration of activities on the construction site likely to result in noise emissions that fail to comply with the standard prescribed under regulation 7 of the Environmental Protection (Noise) Regulations 1997;
 - Predictions of noise emission on the construction site;
 - Details of measures to be implemented to control noise (including vibration) emissions; and
 - Complaints and incidents response procedure.
5. With regard to Condition no. 19, the City will be looking for the following design features:
- Overall energy reduction and direct reduction in running costs of common areas and Class 9a fit out areas.
 - High performance facades which facilitate daylight penetration;
 - Reduced lighting and small power loads of common areas and Class 9a fit out areas.
 - Improved indoor air quality through improved material selection and filtration;
 - High efficiency HVAC systems;
 - Renewable energy systems such as and solar photovoltaic;
 - Enhances and effective commissioning and building tuning;
 - Advanced technology vertical transportation;
 - Metering and measuring outcomes;
 - Interior design and procurement strategies for communal areas which utilise green building products;
 - Material selection and recycling; and
 - Training staff on correct building operation.
6. The applicant and landowner are advised that service and/or delivery vehicles are not to service the premises before 7.00 am or after 7.00 pm Monday to Saturday, and/or before 9.00 am or after 7.00 pm on Sundays and Public Holidays unless otherwise approved by the City beforehand.
7. The applicant and landowner are advised that the location of any bin stores shall be behind the street alignment and so as not to be visible from a street or public place, in accordance with the City's Health Local Law 1997.
8. The applicant and landowner are advised that all internal water closets and ensuites without fixed or permanent window access to outside air or which open onto a hall, passage, hobby or staircase, shall be serviced by a mechanical ventilation exhaust system which is ducted to outside air, with a minimum rate of air change equal to or greater than 25 litres / second.
9. The applicant and landowner are advised that adequate staff and public sanitary conveniences shall be provided in accordance with the Building Code of Australia. Where these are situated externally to the public building, the area providing access to the sanitary conveniences shall be illuminated.
10. The applicant and landowner are advised that prior to the commencement of any demolition works, any Asbestos Containing Material (ACM) in the structure to be demolished, shall be identified, safely removed and conveyed to an appropriate landfill which accepts ACM.

Removal and disposal of ACM shall be in accordance with *Health (Asbestos) Regulations 1992*, Regulations 5.43 - 5.53 of the *Occupational Safety and Health Regulations 1996*, *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, *Code of Practice for the Management and Control of Asbestos in a Workplace*, and any Department of Commerce Worksafe requirements.

Where there is over 10m² of ACM or any amount of friable ACM to be removed, it shall be removed by a Worksafe licensed and trained individual or business.

11. The applicant and landowner are advised that the City a Form1 *Application to Construct, Extend or Alter a Public Building* is required to be submitted to the City, prior to the issuing a Building Permit.
12. The applicant and landowner are advised that a separate application is required to be lodged and approved prior to the erection/installation of any signage on the lot.
13. The applicant and landowner are advised that all street tree assets in the nature-strip (verge) shall not be removed. Any approved street tree removals shall be undertaken by the City and paid for by the owner of the property where the development is proposed, unless otherwise approved under the Nature Strip Development approval.
14. The applicant and landowner are advised that any development in the nature-strip (verge), including footpaths, will require a Nature-Strip Development Application (NSDA) to be lodged with, and approved by, the City's Technical Services department, prior to construction commencing.
15. The applicant and landowner are advised that if the owner/tenants decide to utilise the City's waste service then all bins shall be serviced as per "inside service" where the collection staff retrieve, service and return bins back to bin enclosure/storage area, which will attract an annual inside service fee in addition to annual waste charges.
16. The applicant and landowner are advised that rubbish bins must be serviced from within the site and not be presented on council verge for collection.
17. The applicant and landowner are advised that all downpipes from guttering shall be connected so as to discharge into drains, which shall empty into a soak-well; and each soak-well shall be located at least 1.8m from any building, and at least 1.8m from the boundary of the block. Soak-wells of adequate capacity to contain runoff from a 20-year recurrent storm event. Soak-wells shall be a minimum capacity of 1.0m³ for every 80m² of calculated surface area of the development.
18. The applicant and landowner are advised that the proposed Medical Imaging facility will require referral, assessment and approval by the Radiation Safety Branch of the Environmental Health Directorate at the Department of Health.

Details: outline of development application

Zoning	MRS:	Urban
	TPS:	Special Use
Use Class:		P – Medical Centre and Hospital (Ancillary to Hospital)
Strategy Policy:		Hollywood Private Hospital Masterplan 2014
Development Scheme:		Town Planning Scheme No. 2 (TPS2)
Lot Size:		~10.5ha. (106,158m ²)
Existing Land Use:		Hospital and Ancillary Facilities

The proposal involves the development of a five-storey consulting/medical centre which consists of the following:

- Demolition of two existing ward buildings and a day rehabilitation facility building.
- Ground floor Radiology and Radiology Oncology Centres;
- Uncovered car parking Covered car parking at the Ground floor and two levels above;
- 33 consulting suites;

- Relocation of some Hospital Services and space for yet to be determined Hospital Services; and
- Relocation of a boiler room which is adjacent to the western side boundary within the existing building footprint of the administration and training building.

The development proposes all patron/visitor vehicle movements to be made through existing public access points to Monash Avenue, with the existing access points to Verdun Street limited to staff and deliveries only.

The applicant has indicated that it is their intention that the building will be subdivided (“built strata”) to allow each tenancy to be individually owned/tenanted like the existing medical centre and specialist centre adjacent to Monash Avenue. This will not impact upon the development compliance, however if the car parking is proposed to be included within the strata plan, the applicant will need to demonstrate compliance for each tenancy as part of the subdivision application.

As the building proposes both consulting suites and relocation of existing hospital services and future hospital services, the land uses are consistent with the Medical Centre and Hospital definitions within the City’s TPS2. This is consistent with the Special Use zoning of the property which permits Hospital and ancillary facilities at the subject property.

The development plans which are the subject of this application are provided as **Attachment 3**.

In support of the application the applicant has provided a report addressing compliance with the relevant planning framework provided as **Attachment 5** and a Traffic Impact Assessment (TIA) and draft Parking Management Plan provided as **Attachment 7** and review of the TIA as **Attachment 8**.

Background:

On 11 March 2014, the Hollywood Private Hospital Masterplan was adopted for the site to install more specific development controls for the site. The Masterplan has power to vary the scheme provisions as per the Special Use table provisions within the City’s Town Planning Scheme No. 2 (TPS2).

The current application was lodged on the 9 of July 2018

The subject site is located at No. 101 Monash Avenue, Nedlands which is bounded by Monash Avenue to the South, Verdun Street to the north, Queen Elizabeth II Medical Centre (QEII) to the east and Nedlands Primary School and a Local Reserve and Nedlands Primary School to the West.

The proposed development is located centrally to the subject property and requires the demolition of three existing ward buildings.

Legislation and Policy:

Legislation

- Planning and Development Act 2005
- Planning and Development (Local Planning Schemes) Regulations 2015
- Planning and Development (Development Assessment Panels) Regulations 2011
- City of Nedlands Town Planning Scheme No.2 (TPS 2)

State Government Policy

- State Planning Policy 4.2 – Activity Centres for Perth and Peel (SPP4.2)
- Development Control Policy 1.6 – Planning to Support Transit Use and Transit Oriented Development

Town Planning Scheme No. 2

The TPS2 Special Use Zone permitted uses and provisions applying to the site are as follows:

- Hospital and ancillary facilities; and*
- Ages persons housing and frail ages persons hotel, subject to being advertised in accordance with the provisions of Clause 6.3.3 and 6.3.4.*
- The development of the site shall be in accordance with the current Mater Plan applicable to the Special Use Zone as approved by Council from time to time, following the procedures set out in Clause 8.3 of the Scheme.*

Local Planning Policies

Hollywood Private Hospital Masterplan

Consultation:Public Consultation

The proposal was formally advertised in accordance with the Planning and Development (Local Planning Scheme) Regulations 2015 and the Hollywood Private Hospital Masterplan requirements as follows:

Advertising method	Advertising dates
Letters to neighbouring residents and landowners within 150m of the subject property for 21 days	7 – 28 August 2018
Nedlands website	7 – 28 August 2018

At the end of the consultation period, a total of 11 submissions was received comprising of 3 objections, 7 comments and 1 support/non-objection.

The main issues raised in the submission received are summarised and addressed in the below table, for full detail refer to Attachment 4.

Issue Raised	Officer's comments
Concerns regarding, Number of car parking bays	Issue Supported The applicant re-calculated the number of car parking bays on site and the number has been revised down from 1959 bays to a total of 1784 bays excluding the provision of ACROD, loading, delivery and ambulance bays. Based on this revised figure being also supported by the Department of Transport and Department of Planning Lands and Heritage, the parking is now considered to be compliant with the 1,800-car parking bay cap.

	Further to this, conditions of development approval include the requirement to implement a car parking management plan and travel behaviour change program to reduce the number of staff/ consultant trips the site generates.
Concerns regarding, Access issues from Verdun Street from construction traffic.	Issue Supported The City has recommended that within the construction management plan access is limited to westbound when utilising Verdun Street and the existing angled crossover to Verdun Street is re-oriented to be 90 degrees to the verge for safer access. Further to this, it is recommended that a temporary crossover is constructed which allows safer access to the site for larger vehicles.
Concerns regarding, Increased traffic along Monash Avenue and Verdun Street.	The applicant has provided a Traffic Impact Assessment (TIA) which has been vetted by the City, DoT and DPLH. The traffic to be generated as part of this development is within the existing road capacity post development and also in a 2031 built out scenario. Further to this, the City is installing a roundabout at the intersection of Monash Avenue and Smyth Road which will improve traffic flow within the area.
Concerns regarding, Use of Highview Park or Hollywood Bowls Club for temporary parking	Issue Noted. The City has no current or future plans to allow Highview Park to be used for temporary parking and parking limits apply for existing parking in the area which will continue to be monitored.
Concerns regarding, Lack of public transport servicing the hospital.	There are frequent direct bus routes to the City (103 and 950) which have stops on Hampden Road and Monash Avenue less than 200m to the east of the subject property. This can service staff commutes and regular visitors to the site as well as those who are not as mobility restricted.
Comment relating to, Variations to the masterplan adopted (building envelope, finished floor level of the building)	The variation to the location of the building is discussed within the report. Essentially the purpose of the development locations and building envelopes was to demonstrate how the built-out scenario will result in compliance with the masterplan document. The development is compliant with the height, plot ratio and car parking cap and therefore variation to the development area and building envelope is considered acceptable.

Consultation with other Agencies or Consultants

The proposal was advertised to external agencies including Department of Planning, Lands and Heritage (DPLH) Infrastructure Planning and Coordination (IPAC) team, the Department of Education (DoE) and the DoT.

See a summary of submissions below, for full detail refer to **Attachment 4**.

1. Department of Planning, Lands and Heritage (DPLH) IPAC Branch
Reason for referral
The development application was referred to IPAC as this team looks after regional roads and analyses development applications impact on these assets. The subject property, although not directly abutting is within proximity of Winthrop Avenue and Aberdare Road. Additionally, the 2007 WAPC resolution indicates a level of state interest in the maximum amount of car parking permitted on the property.
Summary of submission
The IPAC team generally provides comments on applications which are likely to impact Other Regional Roads (ORR). The proposal is located well away from ORR Winthrop Ave and ORR Aberdare Road. The current traffic volumes on the ORR's indicate they have capacity to accommodate the expected traffic volumes.
It appears that the impacts of the proposal appear to largely fall on the local road network (Verdun Street and Monash Avenue) and the associated access points. Therefore, the IPAC team has no comment to make on this application.
2. Department of Transport (DoT) & DPLH – Central team
Reason for referral
The City consulted with the Department of Transport (DoT) due to the initial development application report submitted by the applicant stating that the actual number of car parking bays on-site was proposed to be 1,959. There is currently a cap of 1800 car parking bays which forms part of the WAPC resolution to adopt the QEII Medical Centre Access and Structure Plan in February 2007. The resolution is as follows:
<i>“Advise the City of Nedlands and Hollywood Private Hospital that the Commission is aware of the maximum limit of 1800 car parking spaces in the approved site structure plan. The Commission would wish to be consulted on any proposal which would lead to a total number of car parking spaces exceeding 1800 bays. The Commission further would be minded to introduce a Clause 32 resolution requiring any development exceeding 1800 bays to be referred to the Commission for its determination”.</i>
The Department of Transport after further consultation with the applicant's traffic consultant has provided a final response and recommended conditions of approval detailed below.
Summary of submission
The DoT has reviewed the 05 July 2018 statement and parking management plan prepared by the applicant's traffic consultant which updates the parking audit from the initial report. The old figures included ambulance, loading and disabled bays and some bays that had been removed for other reasons.
The DoT believes that technically the ACROD bays should be considered as part of the total cap but for the sake of a 1% variation over the 1800 bays, this is not significant. For the DoT to endorse this application, Hollywood Private Hospital (HPH) need to commit to the introduction of paid parking for staff on January 1 2019 and to integrate that with the behaviour change program. The behaviour change programs for staff have not been successful in the past due to the availability of free parking for staff.
The DoT believes that it is key that HPH will have to properly manage their parking before they apply for any subsequent stages. Therefore, with the condition of the development approval to implement parking management and Travel Behaviour Change programs, the development is acceptable from a transport and parking viewpoint.
The DoT has assisted the City of Nedlands in the preparation of appropriate conditions of development approval to this effect.
The DPLH was advised of the above and concurred that involvement from the WAPC in the determination of this application is not required and further consideration will be given to the

planning framework over the site which may include the imposition of a clause 32 area in the future.
3. Department of Education – Hollywood Primary School
Reason for referral
The subject property is adjacent to the Hollywood Primary School site.
Summary of submission
No objection subject to no disruption in the operation of the Hollywood Primary School.
4. Department of Health – Queen Elizabeth II Medical Centre Trust
Reason for referral
The subject property is adjacent to the QEIIIMC site.
Summary of submission
Please see Attachment 11 .

As per the DoT recommendation, the City will review existing on-street car parking along Monash Avenue post completion of the development and make any appropriate changes to restrictions if car parking along Monash Avenue will become problematic.

Planning Assessment:

State Planning Policy 4.2 – Activity Centres for Perth and Peel

The subject site is identified under State Planning Policy 4.2 (SPP 4.2) as part of the wider UWA-QEII Specialised Activity Centre, which is an area requiring the preparation of an Activity Centre Plan (ACP). An existing Master Plan approved in 2014, currently provides guidance for the redevelopment of the site and is referenced within the City's TPS2.

The City advertised a new Local Planning Scheme (LPS3) from December 2017 to March 2018 to the community which did not propose any development guidance or controls for the subject property and therefore as the site is within an activity centre, may require the adoption of a new Activity Centre Plan (ACP) to guide future development.

The adjoining QEII site to the east is currently undergoing a master planning process which is expected to address matters such as infrastructure and connection to and from the site and its relationship with surrounding land uses.

The existing Masterplan for the Hollywood Private Hospital site was prepared over five years ago and requires re-evaluation in the context of changes made to the State strategic and regulatory planning frameworks since its drafting and adoption.

The applicant consulted with the City and DPLH earlier this year in relation to the most appropriate form development controls should take with initial assumption being for a partial ACP, and if so consent to prepare a partial ACP.

The City initially proposed that a Local Development Plan (LDP) would need to be prepared for the site in the iteration of LPS3 initially endorsed by Council, however this provision was removed from LPS3 prior to consent being granted for the City to advertise. Therefore, the City advised the applicant of their support for either an LDP or a partial ACP.

The DPLH advised that an ACP for the Hollywood Private Hospital site is not the most appropriate mechanism because the site is part of the UWA-QEII specialised activity centre (SAC) identified in SPP4.2 and the Central Sub-regional Planning Framework. SPP4.2 provides that a structure plan should cover the whole of the activity centre boundary.

The City is advised that the DPLH are in the preliminary stages of coordinating an ACP for the UWA-QEII Strategic Activity Centre, which is intended to be undertaken in collaboration with the relevant stakeholders, including integrating the master planning processes already underway (at

various stages) by UWA and QEII. However, the aim of the proposed ACP to address built form objectives and requirements (such as building heights and setbacks) in the context of the existing development, site servicing, access and parking is supported.

Clause 46 – 47 of the deemed provisions within the 2015 Regulations specifies the purpose of an LDP and when an LDP may be prepared. Based on these provisions, the DPLH advised that their preliminary position is that an LDP is more appropriate.

The City is advised that the DPLH is currently considering a recommendation to seek WAPC agreement that an LDP for the Hollywood Private Hospital site be required for the purpose of orderly and proper planning to facilitate future development.

The City believes that the structure, content and format of the current Masterplan is somewhat outdated given the changes to the planning framework since the Masterplan was adopted and does not serve both parties interests in terms of development control which is flexible whilst also maintaining the amenity and functionality of the locality.

The City therefore advises that prior to any further development applications being lodged, the applicants have the Local Development Plan finalised. A copy of all correspondence in relation to this matter is provided as **Attachment 13**.

Development Control Policy 1.6 – Planning to Support Transit Use and Transit Oriented Development

The subject property is within a transit orientated precinct with the property being within about 5-7 minutes walking time, or 400m, of bus stops located on bus routes with multiple bus services that are high frequency of 15 minutes or less during peak periods. The following table outlines the relevant policy provisions and assessment of the proposal against these provisions:

Provision of Policy	Officer comment
<p><u>4.2 Land use to support transit</u></p>	
<p><u>4.2.4</u> Other uses that are likely to be significant generators of transit trips should also be located close to transit facilities wherever possible. Relevant uses include offices and other ‘high density’ employment- generating activities, intensive leisure facilities, and retailing. Similar considerations apply to uses such as aged persons development, schools and tertiary education uses, hospitals, community facilities and social services.</p>	<p>The existing hospital use is being retained with additional medical consulting and radiology services to be provided. The more intense uses – being the proposed radiology services – are proposed to be provided on the ground floor.</p>
<p><u>4.2.7</u> Building robustness into the planning of transit oriented precincts is also encouraged because it can make it easier for the area to evolve, and for the progressive replacement of less intensive uses and activities, for example replacing surface level car parking with structured parking and more intensive uses, including more compact mixed use developments and higher density residential uses.</p>	<p>The development will include additional car parking at grade and above ground to ensure the development is self-sufficient from the existing hospital car parking. The applicant has advised future developments are likely to be where existing at grade car parking is located.</p>

4.4 Transit supportive design	
<p>4.4.1 Land uses that promote interest, interaction and activity should be used to animate frontages along the principal pedestrian routes leading to and from the transit facility. Uses should be oriented to the street and the public domain, and should include activities at ground floor level that promote interaction and surveillance, provide interest for pedestrians, enhance security, and increase the attractiveness of walking to access transit facilities.</p>	<p>The development includes ground floor radiology services to activate the ground floor.</p>
4.5 Integrating transit infrastructure	
<p>4.5.1 Transit infrastructure should be designed to suit the scale and character of its surroundings.</p>	<p>Bicycle storage for visitors and staff is proposed as well as end of trip facilities suitable for the scale of the development.</p>
<p>4.5.2 Transit facilities should be designed to provide a high standard of amenity for transit users, with appropriate station-based facilities, and a safe and secure environment, especially for those users accessing the facilities on foot or by bicycle.</p>	<p>The location of said end of trip facilities and bicycle storage are co-located and conveniently located adjacent to pedestrian entry to the building.</p>

Local Planning Scheme

The City’s TPS2 requires that development is to be in accordance with the Hollywood Private Hospital Masterplan which has provisions with override all provisions of the City’s TPS2 including building height and building setbacks. The Masterplan however references the car parking requirements of TPS2.

Hollywood Private Hospital Masterplan 2014

The below table incorporates the relevant car parking provisions of the City’s Town Planning Scheme No. 2 and all relevant provisions of the Hollywood Private Hospital Masterplan 2014.

Requirement	Compliance
<p><u>Car Parking</u></p> <p><i>TPS2</i> 1 bay per 4 beds.</p> <p>No requirement specified within consulting rooms/medical centre.</p> <p><i>Masterplan</i> WAPC 2007 resolution of 1800 car parking bay cap adopted within masterplan.</p>	<p>Yes</p> <p>There is currently a surplus of car parking in excess of 900 bays.</p> <p>The development proposes the demolition of three ward buildings and hence reduces the required number of car parking bays. Further to this, the development proposes 260 new car parking bays which will ensure the consulting rooms will not depend on existing car parking for the hospital. Whilst the development has some yet to be decided future hospital services, there will be no implication in terms of shortfall due to the existing surplus of car parking.</p>

	The provision of 260 bays brings the total number of car parking bays up to 1784 bays.
<p><u>Access</u></p> <p>No additional traffic is permitted to Verdun Street without Council approval as Verdun is a local road with limited carrying capacity.</p>	<p>Yes</p> <p>Verdun Street is proposed to be retained for staff and service vehicle access only. A condition of development approval is recommended accordingly.</p>
<p><u>Plot Ratio</u></p> <p>Maximum plot ratio for the site is 1.0</p>	<p>Yes</p> <p>The plot ratio is proposed to be approximately 0.8 given the demolition of the existing wards to facilitate the proposed development. The plot ratio is inclusive of the car parking areas above natural ground level.</p>
<p><u>Building Height</u></p> <p>The maximum wall height for the site is 39.45 AHD (Australian Height Datum) and 35.1 for the northern portion of the building.</p>	<p>Yes</p> <p>The core is proposed to have a wall height 36.626 AHD and the rest of the building has a wall height of 34.187 AHD.</p>
<p><u>Building Setbacks</u></p> <p>All buildings are to have a minimum setback of 10m to the northern, southern and western lot boundaries. It is noted that the building setback along the eastern boundary with QEII is not a significant issue and shall be determined by Council.</p>	<p>Yes</p> <p>Located centrally to the site.</p>
<p><u>Development Location and Building Envelope</u></p> <p>An indicative building footprint and area have been shown to assist in determining compliance with parking, plot ratio and other standards.</p>	<p>No</p> <p>All new development is required to be located within a development area and within the indicative building envelope location. The development is proposed to straddle two development areas and is therefore also not within a building envelope.</p>
<p><u>Open space and landscaping</u></p> <p>Existing and future landscaped areas to comprise of 25% of the site area.</p> <p>The internal perimeter road adjacent to Verdun Street which is set behind landscaping reducing any visibility from Verdun Street.</p> <p>Any new car parking areas, shade trees shall be provided at a rate of 1 per 4 bays.</p> <p>Landscaping species to be as per the Masterplans</p>	<p>No</p> <p>The applicant has prepared a landscape concept showing the location of landscaping and the species types proposed.</p> <p>The Scheme and Masterplan document do not include a definition of open space, however more than 25% of the site does not contain buildings.</p> <p>It is not clear within the landscaping concept plan if there are shade trees provided at a rate of 1 per 4 bays.</p> <p>The species provided do not comply with the Masterplan document. Recommend condition that revised landscaping plan submitted with compliant species proposed with densities and maturities to be provided as well as the plan being inclusive of hard landscaping detail.</p>

	Condition recommended that the number of trees provided to the car parking area is 1 per 4 bays. Condition landscaped areas reticulated and maintained to city's satisfaction.
<p><u>End of Trip Facilities</u></p> <ul style="list-style-type: none"> • Provision of secure undercover bicycle parking spaces for staff use. • U-Rail or equivalent bicycle parking spaces to be located near the entrance of the building for visitors. • Provision of a locker per bicycle space; • Provision of showers at appropriate rate to the number of bicycle spaces. 	<p>Yes</p> <p>Two showers provided Room at ground floor for EOT provided to be fitted with lockers for staff Unsecure bicycle parking provided outside the EOT facilities.</p> <p>A condition has been recommended that separate and secure staff bicycle parking is provided. Condition visitor parking provided.</p>
<p><u>Pedestrian Way-finding and access</u></p> <p>The hospital is planned around north-south corridor which links all major functions and vertical circulation nodes.</p>	<p>No</p> <p>The pedestrian routes proposed on the masterplan are located between the two development areas where the building is proposed. A condition of development approval is recommended which requires appropriate signage being provided on site to direct pedestrian movements is recommended to address this.</p>
<p><u>Site Planning</u></p> <p>Continue to develop new buildings consistent with the Masterplan which requires buildings up to 6 storeys developed in the central lower portion of the site. Continue to develop all new buildings to have a high standard of visual amenity and presentation within the site.</p>	<p>Yes</p> <p>The new building is proposed to be under the height limit permitted for the central portion of the site and will be constructed of materials which will have a language with the existing architecture of the property.</p>
<p><u>Built form</u></p> <p>New buildings will contribute and support the established architecture language along Monash Avenue. A blend of contemporary and traditional materials such as masonry, glass and façade panels bind the new and existing buildings on the site.</p>	<p>Yes</p> <p>The materials of construction include masonry (grey/black and some red), aluminium cladding and metal screens in charcoal and copper colours. The architecture has elements from the current theatre expansion, Anne Leach wing completed in 2015 and other buildings with the use of common materials and similar architecture without having replication across the site so each building has a slightly different character.</p>
<p><u>Safety and Security</u></p> <ul style="list-style-type: none"> • Maximise the opportunity for passive surveillance through building and open space design; • Installation and monitoring of a CCTV security system site wide; • Electronic control of all key access points; 	<p>Yes</p> <p>A condition of development approval is recommended.</p>

<ul style="list-style-type: none"> • Lighting to be designed to illuminate all pedestrian and vehicle paths, roads and corridors; • Avoidance of obstacles and landscaping which may impede visual control of public areas through sensitive design cognisant of design to prevent crime and improve individual safety on the campus; and • Vandal proof material selection and treatments. 	
<p><u>Sustainable Design Features</u></p> <ul style="list-style-type: none"> • Overall energy reduction and direct reduction in running costs; • High performance facades which facilitate daylight penetration; • Reduced lighting and small power loads; • Improved indoor air quality through improved material selection and filtration; • High efficiency HVAC systems; • Renewable energy systems such as solar thermal and solar photovoltaic; • Enhances and effective commissioning and building tuning; • Advanced technology vertical transportation; • Metering and measuring outcomes; • Interior design and procurement strategies which utilise green building products; • Material selection and recycling; and • Training staff on correct building operation 	<p>Yes</p> <p>A condition of development approval is recommended.</p>
<p><u>Universal access</u></p> <p>Compliance with BCA and the Australian Standards required.</p>	<p>Yes</p> <p>To be addressed at the building permit stage.</p>
<p><u>Services infrastructure</u></p> <ul style="list-style-type: none"> • Upgrade existing electrical, hydraulic, communication services, chilled water and steam waste collection and other services for future development. • Access to Water Corporation easement retained. • Stormwater retained on site 	<p>Yes</p> <p>A condition of development approval is recommended to contain stormwater on site.</p> <p>Upgrades are proposed to relocate boiler room.</p> <p>Access to Water Corporation easement is maintained.</p>

Planning and Development (Local Planning Schemes) Regulations 2015

Clause 67 of the Regulations require the City to have due regard to the following matters which are relevant to the development which are not addressed in the other sections of this report:

Requirement	Compliance
<p>The amenity of the locality including the following:</p> <ul style="list-style-type: none"> i. environmental impacts of the development; ii. the character of the locality; iii. social impacts of the development. 	<ul style="list-style-type: none"> • The development proposes negligible environmental impact. • The character of the locality is not impacted with the development consistent with existing development on the property and eastern neighbouring property. • The development will provide an important community benefit, appropriately co-located with existing hospital facilities.
<p>The availability and adequacy of the following –</p> <ul style="list-style-type: none"> i. public transport services; ii. public utility services; iii. storage, management and collection of waste; iv. access for pedestrians and cyclists (including end of trip storage, toilet and shower facilities); v. access by older people and people with disability; 	<ul style="list-style-type: none"> • The development has access to public transport and a condition of approval is recommended to provide a Travel Behaviour Program to incentivise the use of alternate travel methods to and from the property. • The development will be well serviced by existing public utilities. • The city has recommended condition that an updated waste management plan is provided. • Pedestrian access to and within the site has been addressed in the report. • Cyclists access and end of trip facilities has also been addressed in the report. • Universal access is mandatory under the relevant Australian Standards and provisions of the BCA for the development, addressed at the building permit stage.
<p>The impact of the development on the community notwithstanding the impact of the development on particular individuals.</p>	<ul style="list-style-type: none"> • The development is located centrally to the subject property and will work in conjunction with existing services provided at the subject property. • The development will provide a community service with the location in terms of setback and height compliant to ensure minimal impact to the residential interface to the north.

Municipal Heritage Inventory

The property is listed on the City's Municipal Inventory. The property is listed as Category C which is as follows:

“Retain and conserve the significance of the place if possible. Generally, places that are significant but not essential to an understanding of the history of the district.

A heritage assessment for the site may be required prior to giving approval for any major development/demolition and a photographic record or similar created prior to works commencing.”

The buildings proposed to be demolished (McCarthy ward, Day Rehabilitation and Frederick Bel ward) are some of the oldest buildings on the property and therefore as per the provisions of the municipal inventory, a condition of development approval is recommended that prior to the demolition, a photographic record is created prior to works commencing.

Traffic Impact Assessment

The proponent submitted a traffic impact assessment (TIA) as per the WAPC Guidelines which was peer reviewed by both the City's Traffic Consultant and the Department of Transport (DoT). The (DoT) has advised no objection to the development subject to conditions (see **Attachment 4**).

The City's traffic consultant made request for additional information to which the applicant's traffic consultant has provided a response and has amended the TIA accordingly. A full list of the initial comments and responses has been provided as an attachment to this report (see **Attachment 8**).

Further to the above, the applicant's traffic consultant and the City's traffic consultant were not initially aware that the Monash Avenue and Smyth Road intersection is proposed to be upgraded to have a round-about installed prior to July 2019 and that existing hospital services are proposed to be relocated into the proposed building. The roundabout will substantially improve traffic flows throughout the locality and ensure that the traffic will fall within acceptable levels for the existing road capacity.

The parking cap as set in the QEII Medical Centre Access and Structure Plan (February 2007) was derived from the capacity of the local road network to accommodate development at the built-out scenario for the QEII Activity Centre area (this cap is also adopted within the masterplan document) and therefore, given the DoT's endorsement of the application, the City is confident that the outstanding issues can be addressed through the submission of additional information through the Parking Management Plan and implementation of a Travel Behaviour Program.

Officer Comments

The development is compliant with the provisions of the masterplan except for landscaping, pedestrian and way-finding access, development area and building envelope location. As detailed in the above table, landscaping and pedestrian and way-finding access can be addressed through conditions of development approval, however the development area and building envelope location requires the exercise of discretion.

Development Area and Building Envelope Location

The masterplan was initially prepared in 2013, with future buildings/development limited to a 5-year scope and the rest of the site sectioned into development areas including building envelopes to be provided within the development areas. The City considers that this form of development control is somewhat restrictive as it does not allow for flexibility to address the staging of new development whilst retaining existing facilities. The City understands that the intention of the development areas and building envelopes were to demonstrate the ability for future development to comply with the plot ratio, parking and other development requirements. The City believes that this proposal does not compromise the overall objectives of the Master Plan to control the impact of the development on the neighbouring residential development and conform to the existing local road network capacity.

With the application of relevant conditions of development approval, the development will comply with all other requirements. The City has recommended that prior to the lodgement of any future development applications, a Local Development Plan is to be prepared and endorsed by the City for the site. The City will refer this LDP to the DPLH for review to ensure consistency with the draft UWA-QEII Strategic Activity Centre ACP which is currently being prepared. This is also crucial given the car parking cap will be close to capacity at 1784 bays as part of this proposal.

Orderly and proper planning

The provisions of the Masterplan specify that the modification of a building footprint within a development area does not require the amendment of the masterplan and any modifications of the Masterplan are to be processed as per the process for amending local planning policies.

The proposed development complies with the intention of the provision of development areas within the Masterplan which is to ensure development can comply with the other development standards within the guidelines such as plot ratio, height, car parking and access. Therefore, the City believes that the amendment process to the masterplan to facilitate this development application's compliance with the Masterplan is onerous and unnecessary to ensuring progressive development outcomes. As specified earlier in the report, the City is recommending that prior to consideration of further development applications, a Local Development Plan is finalised to ensure the development controls for the site reflect the current planning framework.

Council Recommendation:

Provided as **Attachment 14**.

Conclusion:

The proposed development for a 5-storey consulting/medical centre is predominantly compliant with the provisions of the Hollywood Private Hospital Masterplan 2014 subject to compliance with the recommended conditions of development approval. The main exception is the location of the development area with the proposed development straddling two future development areas indicated in the masterplan. The City however, deems this an acceptable variation given compliance with the other provisions of the Masterplan which is the intention of the provision of the development areas.

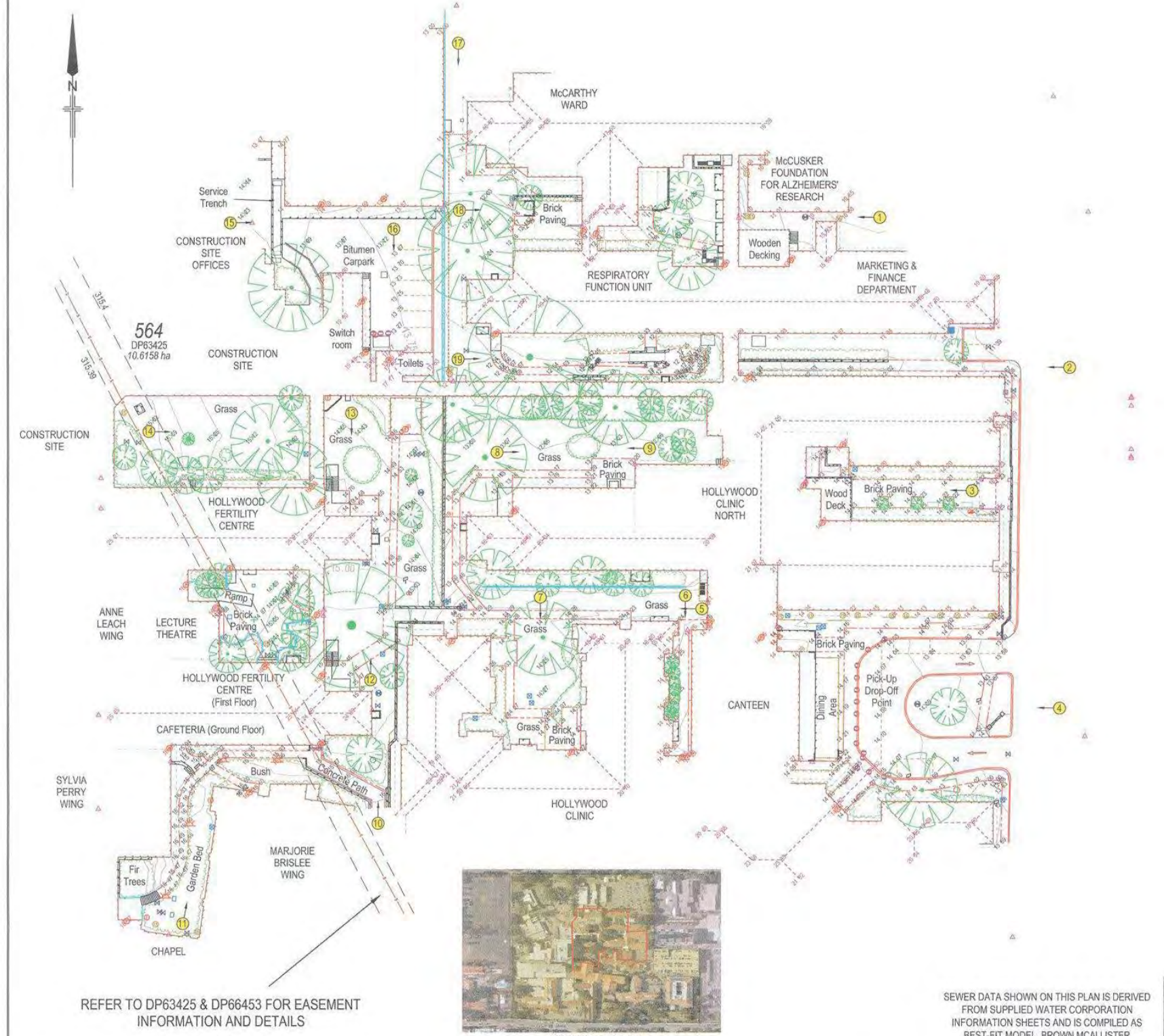
The cap of 1,800 car parking bays applicable to the property through 2007 WAPC resolution has not proposed to be exceeded with the DoT endorsing the development subject to conditions of development approval for a parking management plan and travel behaviour program to be implemented. Further to this, the traffic impact of the development is limited by the car parking cap with the existing local road network able to accommodate the increased traffic movements proposed as part of this application.

Therefore, the City finds the development consistent with the relevant planning framework and recommends the application is approved subject to conditions.

Attachment 1 – Aerial Image

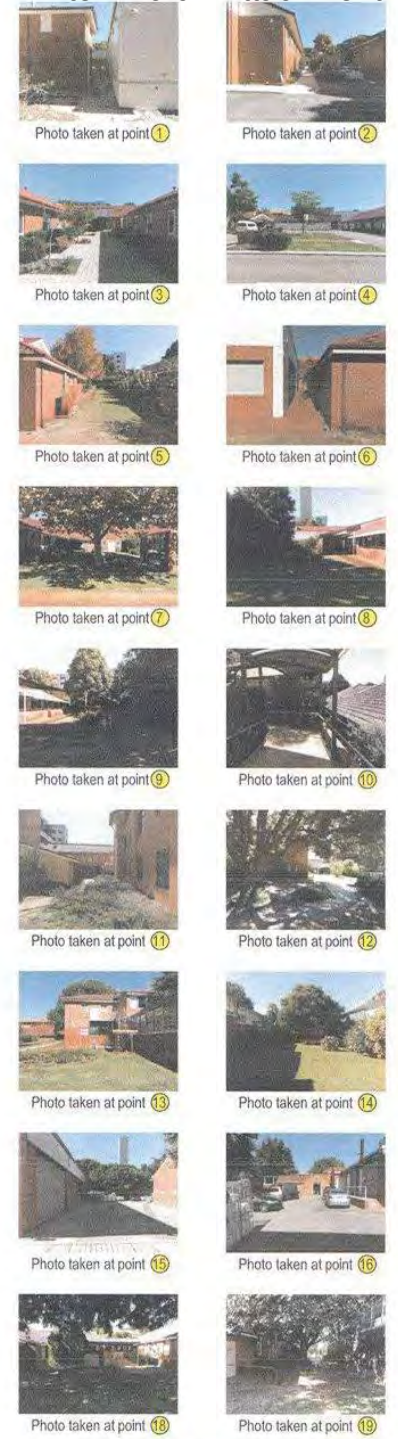


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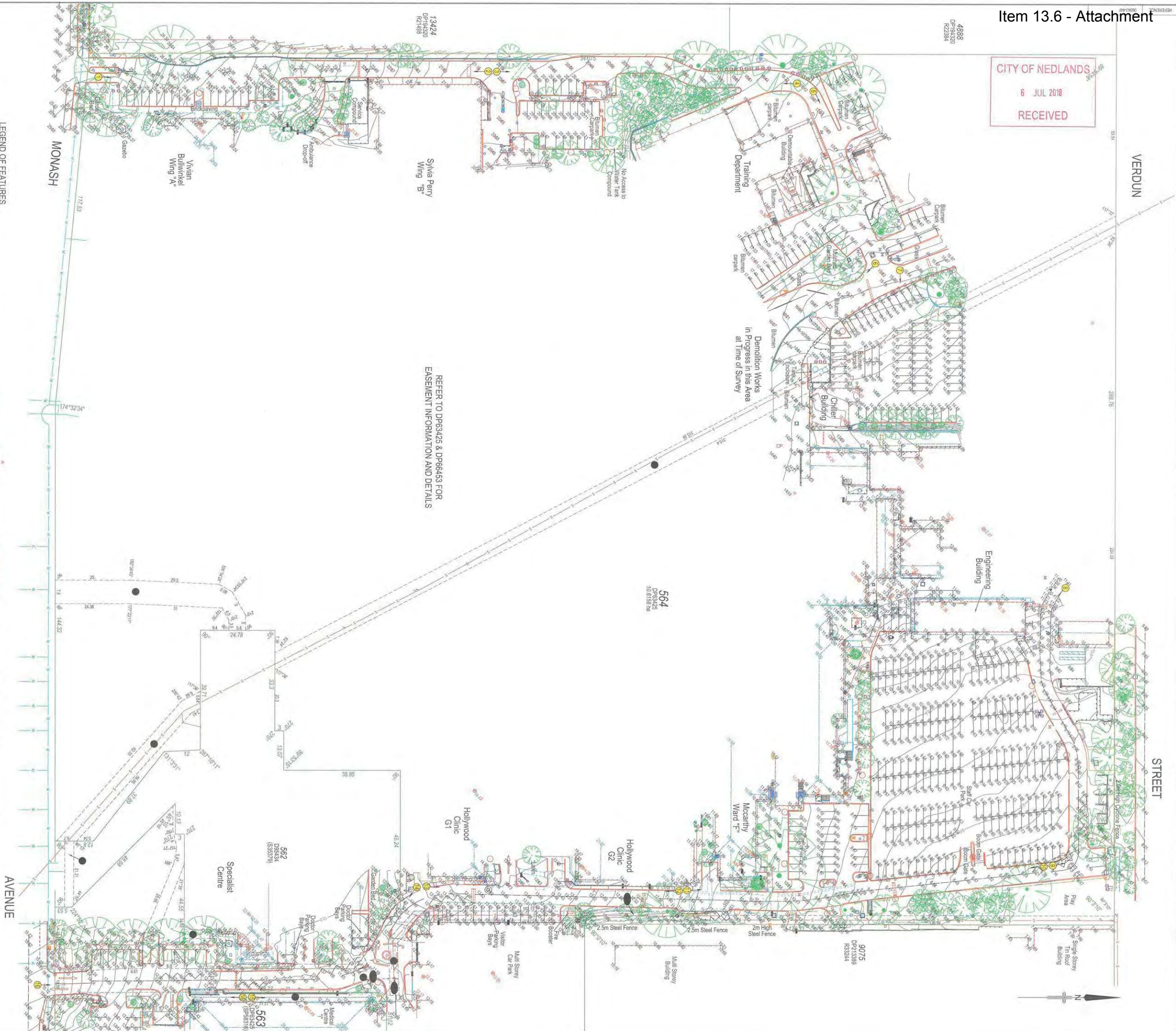
LEGEND OF FEATURES

- Contour (0.25m Interval)
- Building / Structure
- Roof / Eave Line
- Roof Ridge Line
- Wall
- Kerb
- Footpath
- Bush Line
- Car Parking Bay
- Retaining Wall
- Edge of Concrete
- Fence
- Hand Rail
- Pipe Rack
- Sewer pipe - Water Corporation Supplied data
- Sewerage Easement
- Natural Surface Level
- Floor Level
- Sign
- Parking Meter
- Flag pole
- Bollard
- Column
- Survey Control Point
- Park Bench
- Communication Pit
- Undefined Manhole
- Retic Control Valve
- Tap
- Stop Valve
- Hydrant Pillar
- Hydrant Ground
- Gully
- Sewer Inspection Shaft
- Gas Meter
- Earth Pit
- Electrical Light Pole
- Electrical Cable Box
- Ground Flood Light
- Tree at Scale



<p>FEATURE SURVEY OF PORTION OF LOT 564 ON DP63425 - HOLLYWOOD PRIVATE HOSPITAL No 101 MONASH AVENUE, NEDLANDS</p>		<p>DATUM HORIZONTAL - PCG94 VERTICAL - AHD</p>	<p>SCALE 1 : 500 @ A2</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>No.</th> <th>APPROVED & ISSUED TO CLIENT</th> <th>DATE</th> <th>T. Pizzi</th> <th>M. Wall</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>DETAILS</td> <td>15/05/2018</td> <td></td> <td></td> </tr> </tbody> </table>	No.	APPROVED & ISSUED TO CLIENT	DATE	T. Pizzi	M. Wall	0	DETAILS	15/05/2018			<p>Brown McAllister Surveyors Licensed Surveyors Land Development & Strata Consultants Engineering Surveyors Email: admin@brownmcallister.com.au Tel: (08) 9386 9688 43 Broadway, Nedlands, Western Australia, 6009 Fax: (08) 9386 9677</p>
No.	APPROVED & ISSUED TO CLIENT	DATE	T. Pizzi	M. Wall											
0	DETAILS	15/05/2018													
<p>Client RAMSAY HEALTH C/- SILVER THOMAS HANLEY HEALTH ARCHITECTURE</p>	<p>COPYRIGHT OF ALL THIS PLAN IS RESERVED BY BROWN MCALLISTER SURVEYORS AND REMAINS THE PROPERTY OF THE AFORESAID AND SHALL BE RETURNED UPON REQUEST. USE OF ALL OR PART OF THIS PLAN IS RESTRICTED WITHOUT PRIOR WRITTEN PERMISSION.</p>	<p>THE BOUNDARIES WERE NOT RE-ESTABLISHED AS PART OF THIS SURVEY THEREFORE THIS PLAN DOES NOT GUARANTEE THEIR ACCURACY.</p>	<p>FIELD INSPECTION IS RECOMMENDED FOR LOCATION OF SERVICES PRIOR TO ANY EXCAVATION</p>	<p>SHEET A2 SURVEYED M. Wall - 11/05/2018 FIELD NOTES DRAWN T. Pizzi - 15/05/2018 CHECKED REFERENCE 06043-45F</p>											

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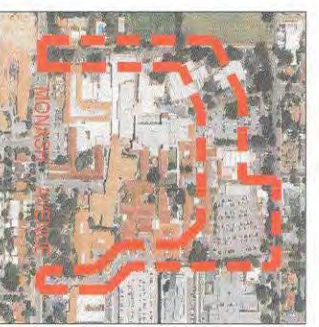
REFER TO DP63425 & DP66453 FOR
EASEMENT INFORMATION AND DETAILS

LEGEND OF FEATURES

- BOUNDARY (INTERVAL OF 0.25M)
- BUILDING / STRUCTURE
- ROOF / LEAVE LINE
- GUTTER
- WALL / TRIM WALL
- FENCE
- BRICK PAVING
- SLAB PATH
- CONCRETE EDGE
- ROAD DASHED LINE MARK
- ROAD CENTRELINE
- KERB
- COOPATED
- COOPATED
- BUSHLINE
- TOP OF BANK
- BOTTOM OF BANK
- LINE OF LEVELS
- DOOR
- WINDOW
- WATER PIPE
- SEWER PIPE

- NATURAL SURFACE LEVEL
- FLOOR LEVEL
- TOP OF WALL LEVEL
- TOP OF FENCE LEVEL
- ELECTRICAL LIGHT POLE
- ELECTRICAL POLE
- POWER DOME
- FIRE SERVICE VALVE
- STOP WATER GRATE
- HYDRANT GROUND
- RETIC CONTROL VALVE
- WATER METER
- UNKNOWN MATCH
- SEWER INSPECTION GULLET
- SEWER INSPECTION SHAFT
- TELESTRUT PIT
- COMMUNICATION PIT
- SOIL AND
- LITTER BIN
- BUS STOP
- TICKET MACHINE
- TREE CANOPY

- PHOTO TAKEN AT POINT 1
- PHOTO TAKEN AT POINT 2
- PHOTO TAKEN AT POINT 3
- PHOTO TAKEN AT POINT 4
- PHOTO TAKEN AT POINT 5
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- PHOTO TAKEN AT POINT 20



FEATURE SURVEY OF PORTION OF
LOT 564 ON DP63425 - HOLLYWOOD PRIVATE HOSPITAL
No 101 MONASH AVENUE, NEDLANDS

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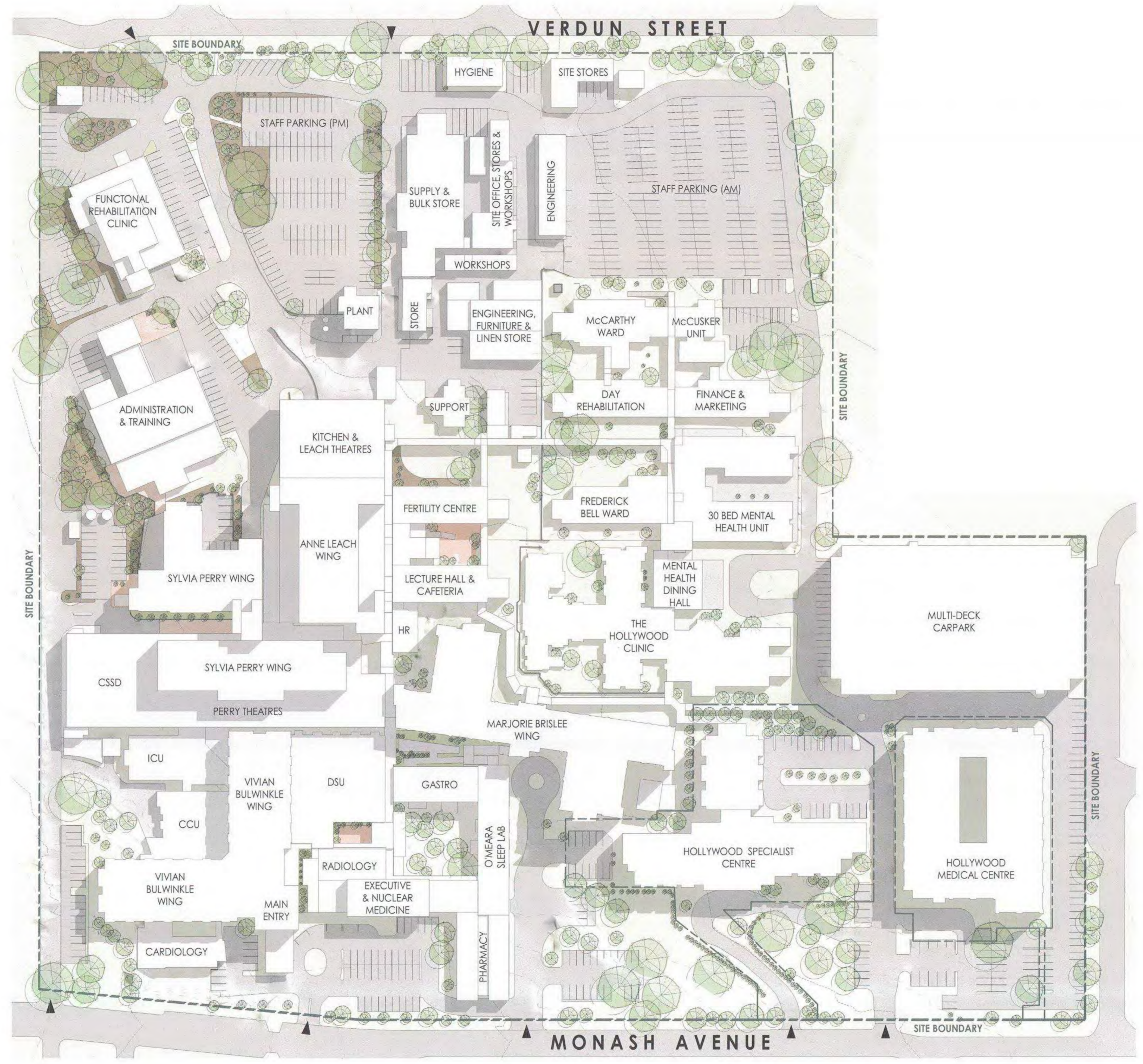
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 43 Broadway, Melbourne, Western Australia, 6009
 Tel: (08) 9396 8888
 Fax: (08) 9396 9877

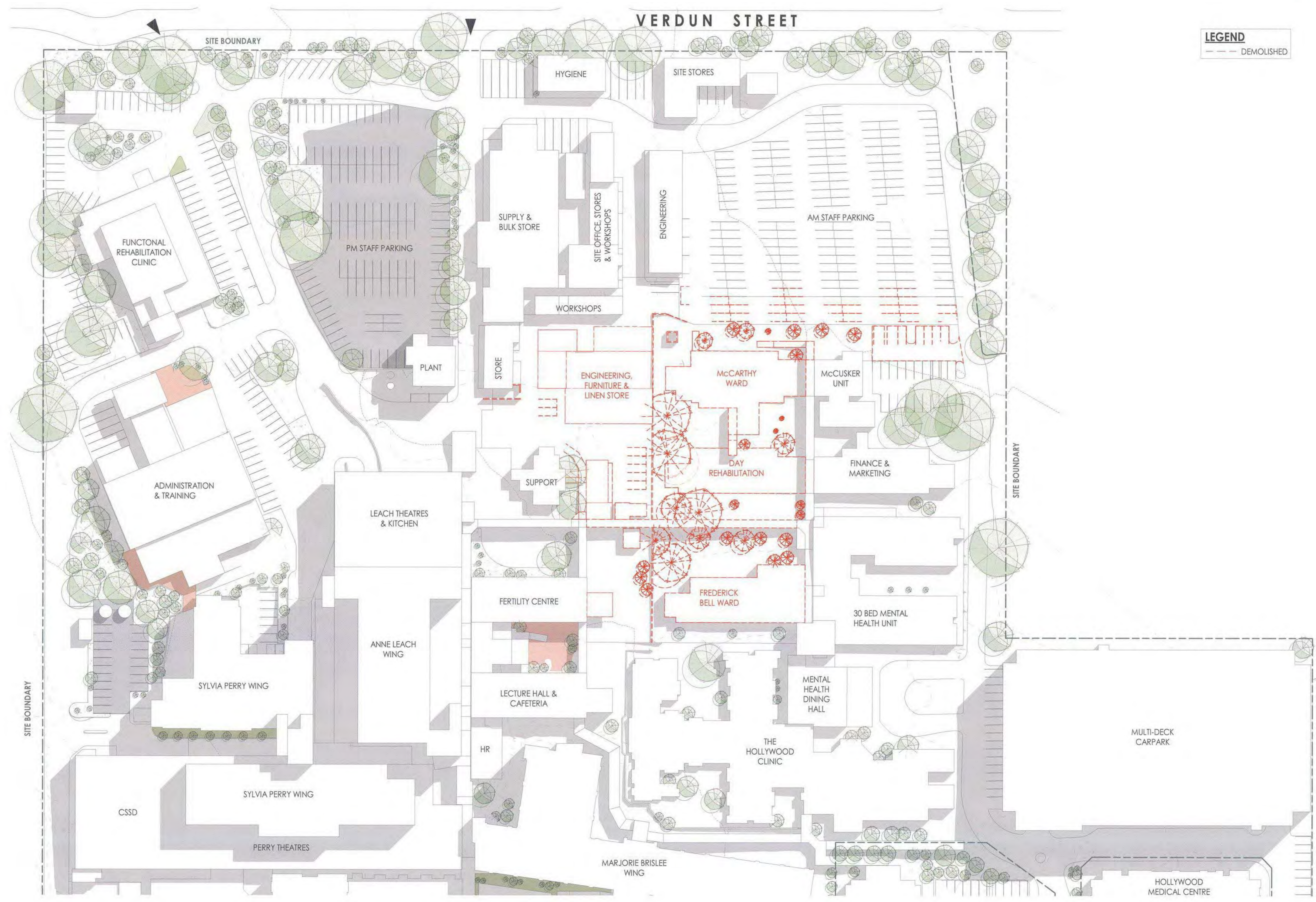
REVISIONS	DATE	BY	CHKD
APPROVED AND SEALED TO CLARENCE T1			

SHEET	AT
DRAWN	D. BROWN
CHECKED	D. BROWN
REFERENCE	08/13-44F





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LEGEND
--- DEMOLISHED



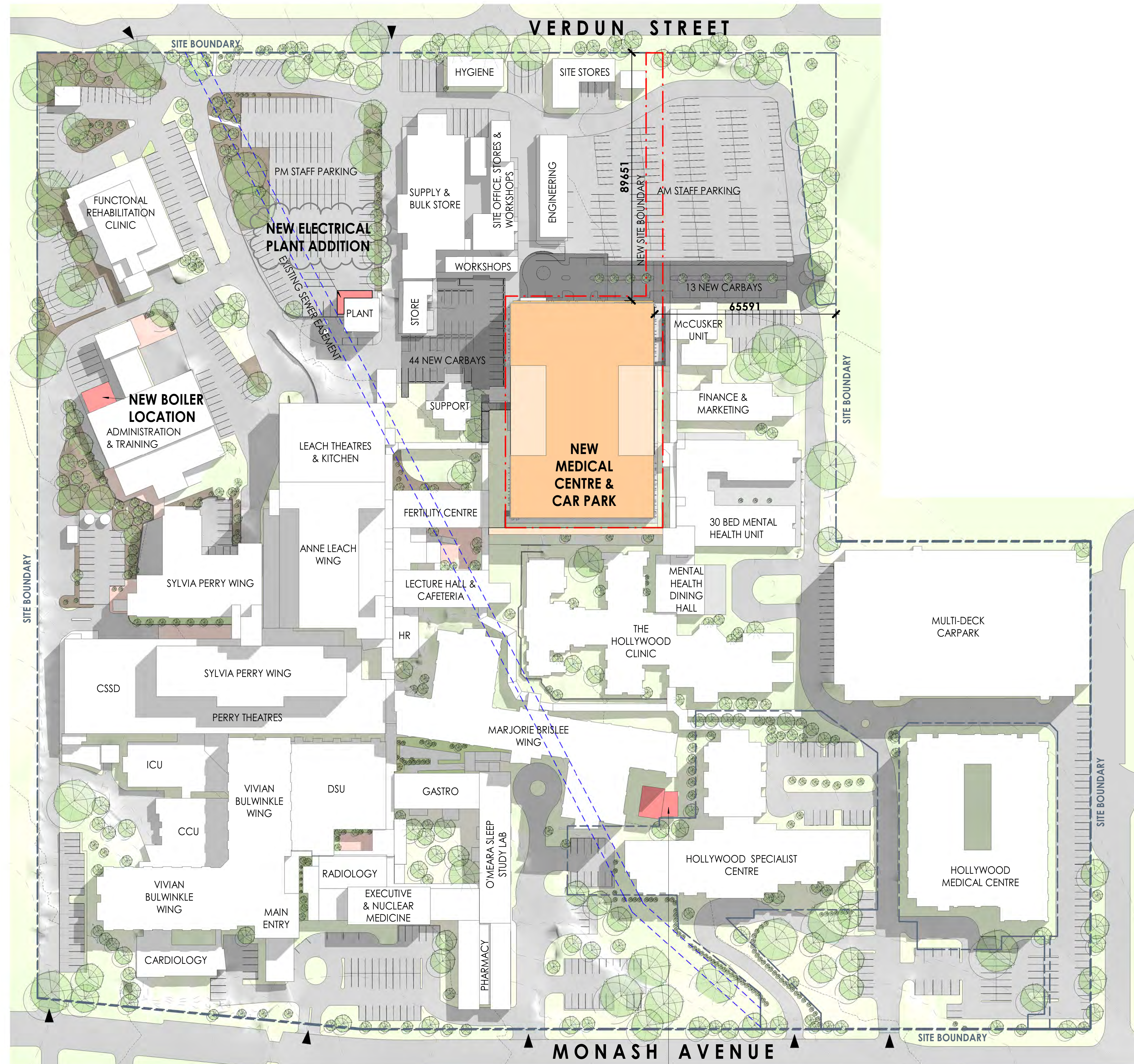
DEMOLITION PLAN
HPH MEDICAL CENTRE AND CARPARK

LOT 564 MONASH AVE, NEDLANDS

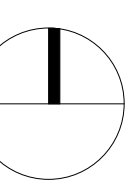
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Project No. 3077
Sheet No. SD.03
Revision A





ALTERATIONS TO EX.
GENERATOR COMPOUND
AND SWITCHROOM



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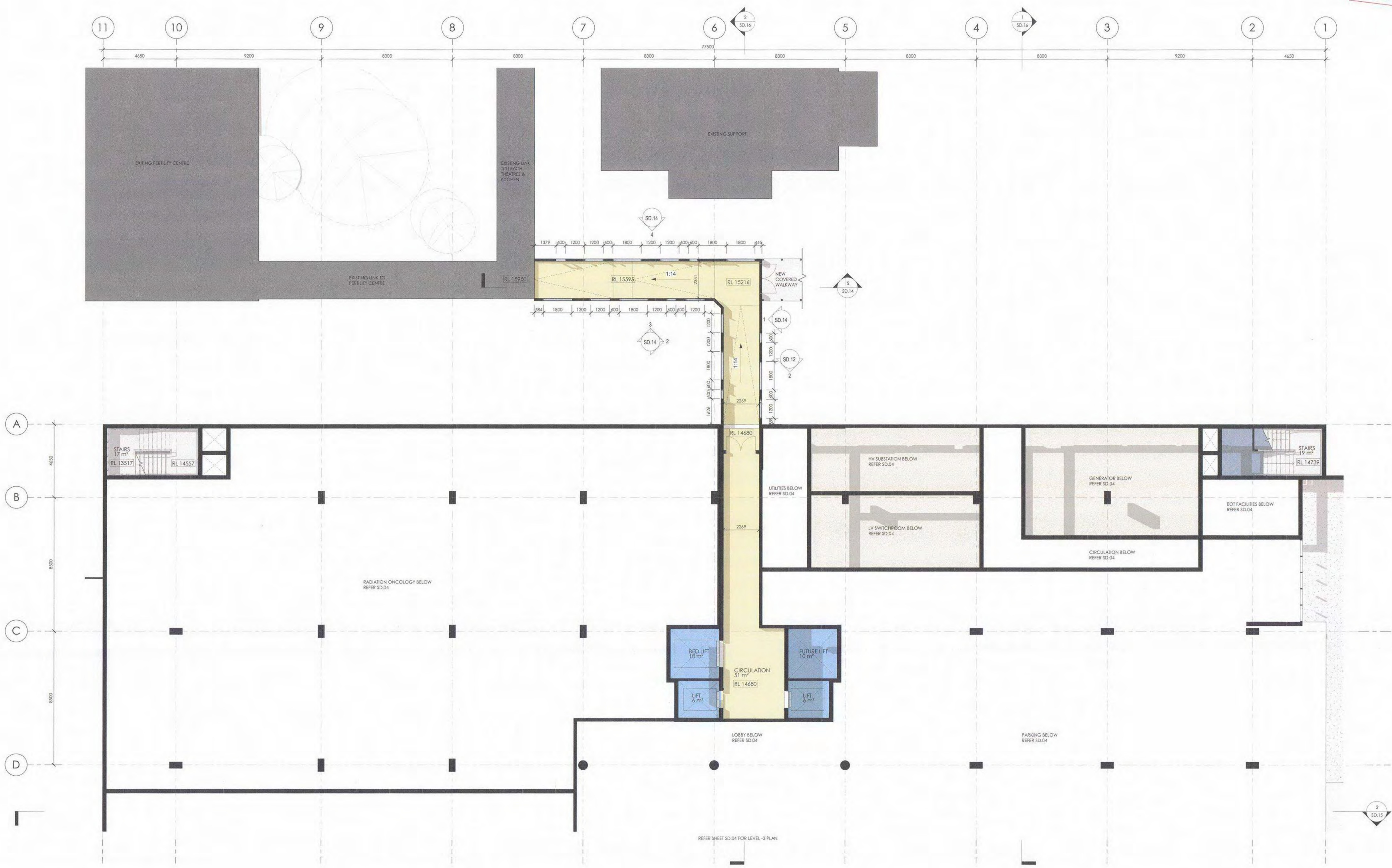
FLOOR PLAN - LEVEL -3 PARKING
HPH MEDICAL CENTRE AND CARPARK

LOT 564 MONASH AVE, NEDLANDS

LEVEL -3 STANDARD CAR BAYS:	28
LEVEL -3 DISABLED CAR BAYS:	6
LEVEL -3 CAR BAYS:	34
TOTAL INTERNAL CAR BAYS:	260
EXTERNAL CAR BAYS:	57
TOTAL CAR BAYS:	317

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Date 06/07/18
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Project No. 3077
Sheet No. SD.04
Revision A



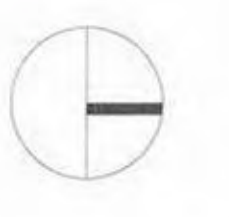
FLOOR PLAN - LEVEL -1.5 MEZZANINE
 HPH MEDICAL CENTRE AND CARPARK

LOT 564 MONASH AVE, NEDLANDS

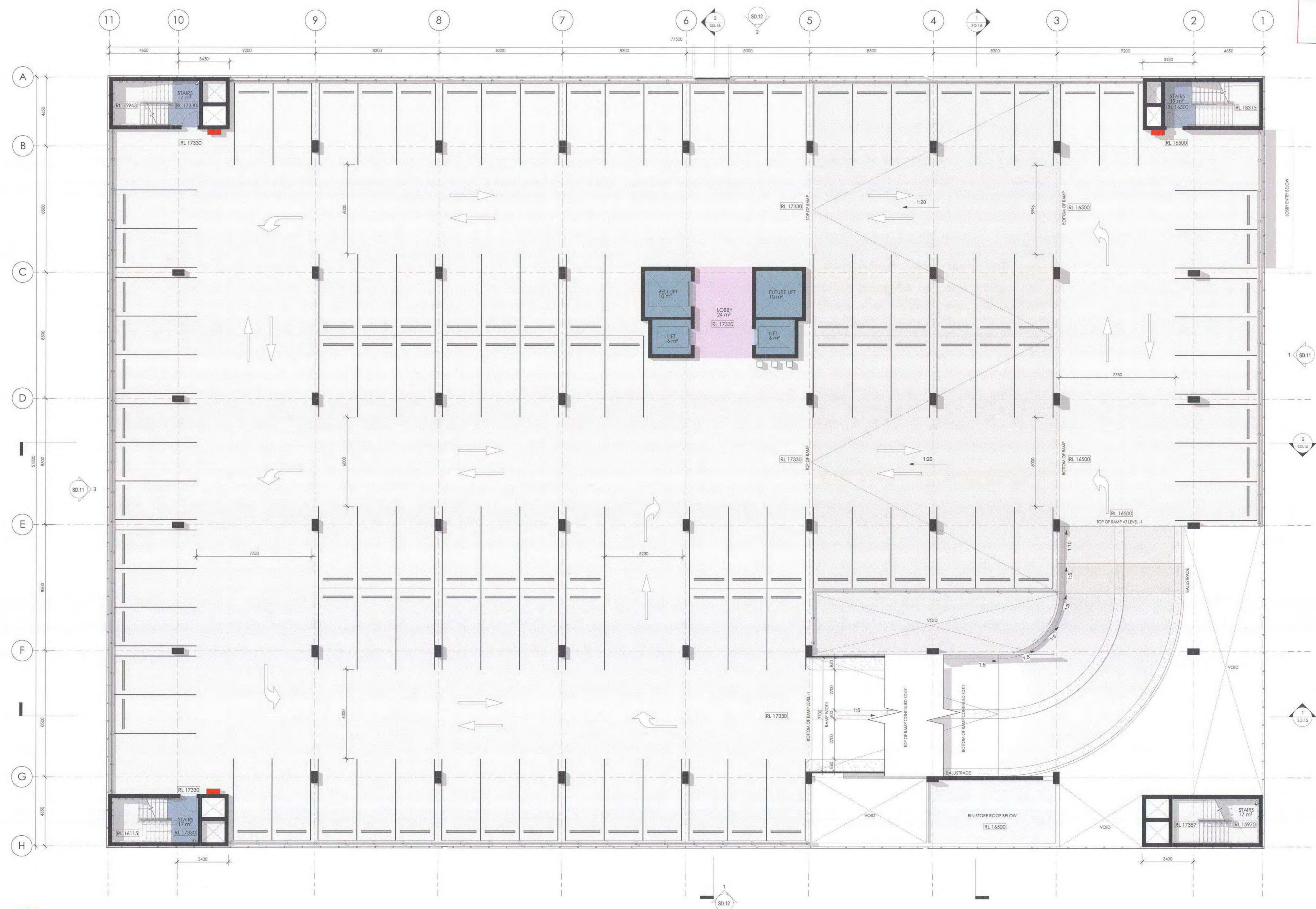


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Project No. 3077
 Sheet No. SD.05
 Revision A



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FLOOR PLAN - LEVEL -1 PARKING
HPH MEDICAL CENTRE AND CARPARK

LOT 564 MONASH AVE, NEDLANDS

LEVEL -1 STANDARD CAR BAYS:	110
LEVEL -1 DISABLED CAR BAYS:	0
LEVEL -1 CAR BAYS:	110
TOTAL INTERNAL CAR BAYS:	260

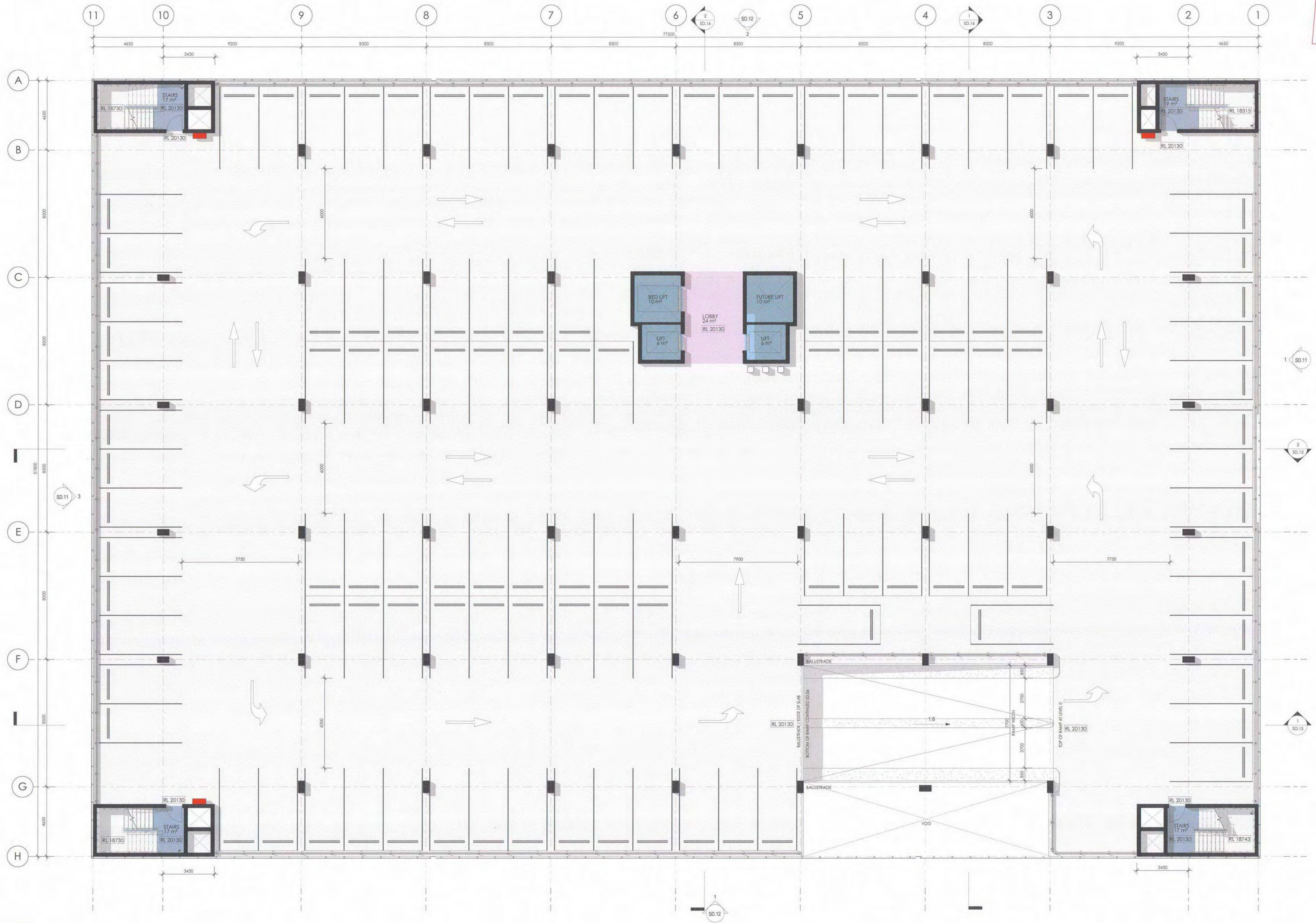
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Project No. 3077
Sheet No. SD.06

Revision A



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FLOOR PLAN - LEVEL 0 PARKING
 HPH MEDICAL CENTRE AND CARPARK

LOT 564 MONASH AVE, NEDLANDS

LEVEL 0 STANDARD CAR BAYS:	116
LEVEL 0 DISABLED CAR BAYS:	5
LEVEL 0 CAR BAYS:	116
TOTAL INTERNAL CAR BAYS:	260

Scale 1 : 100 @ B1
 Date 06/07/18
 SCALE BAR 1:100

Project No.	3077	Sheet No.	SD.07	Revision	A
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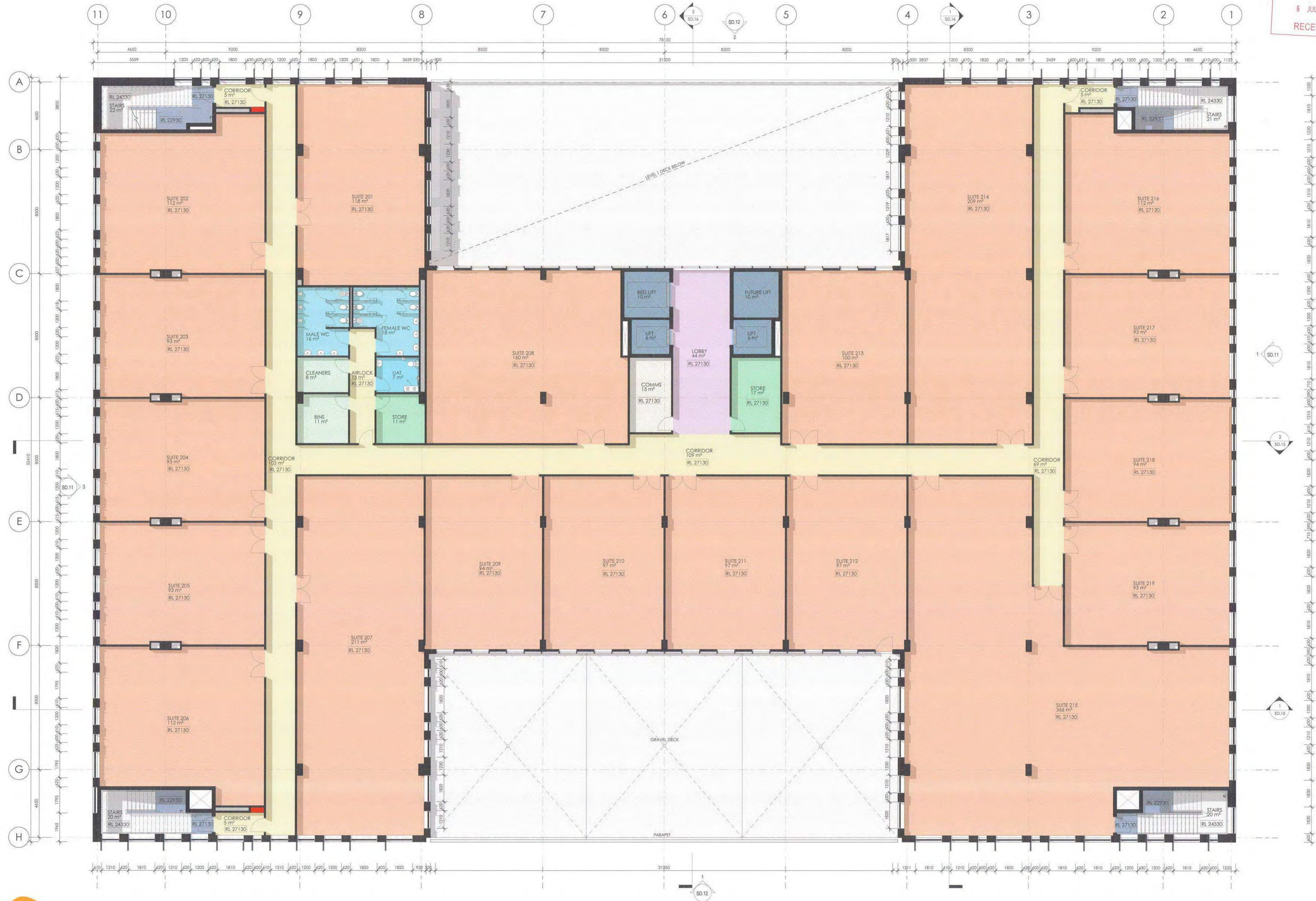


FLOOR PLAN - LEVEL 1 MEDICAL CENTRE & GASTRO
 HPH MEDICAL CENTRE AND CARPARK LOT 564 MONASH AVE, NEDLANDS

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Project No.	Sheet No.	Revision
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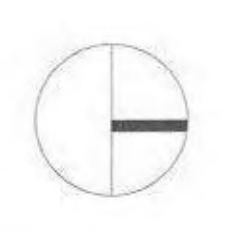
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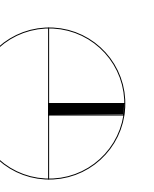
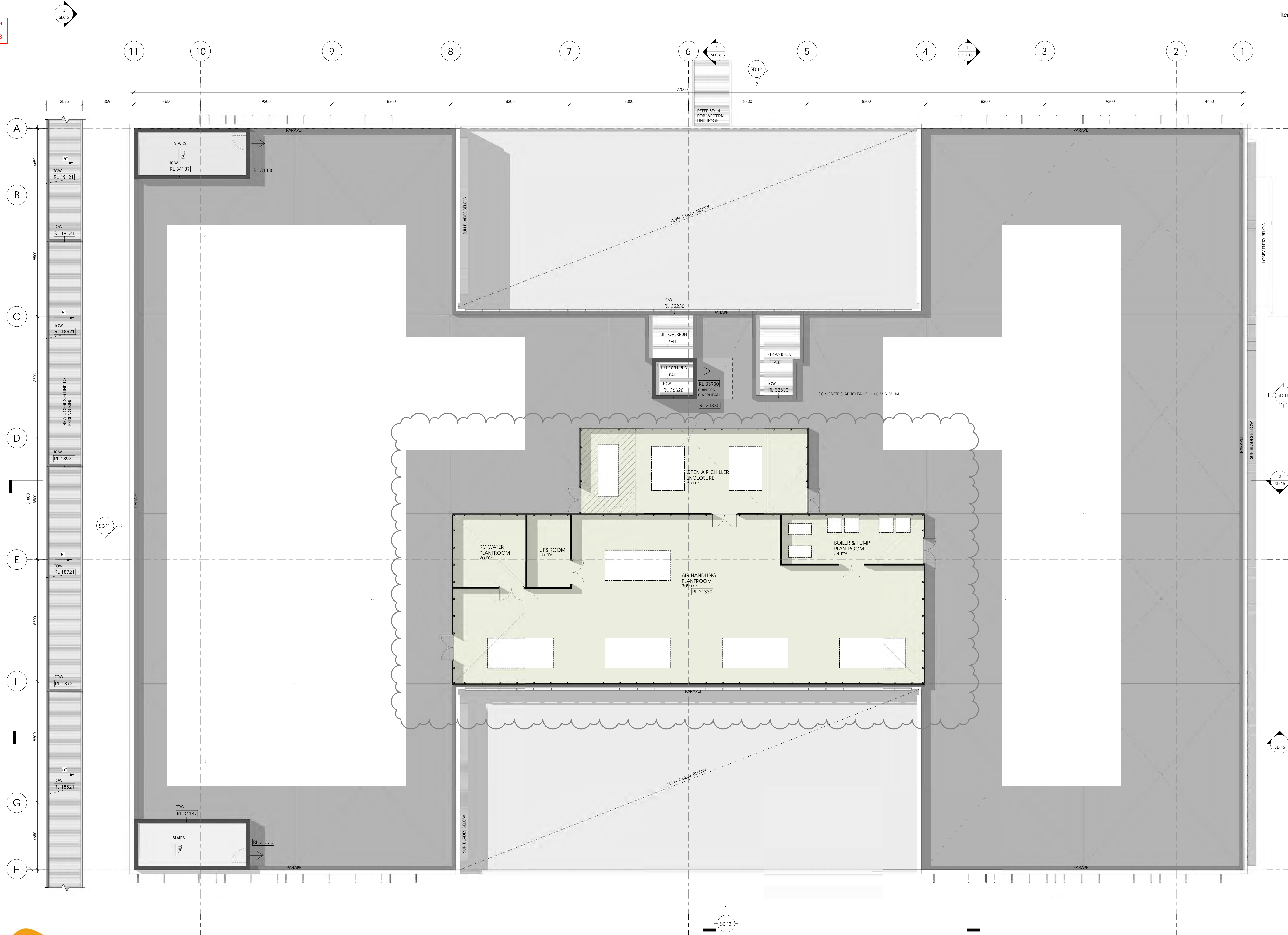
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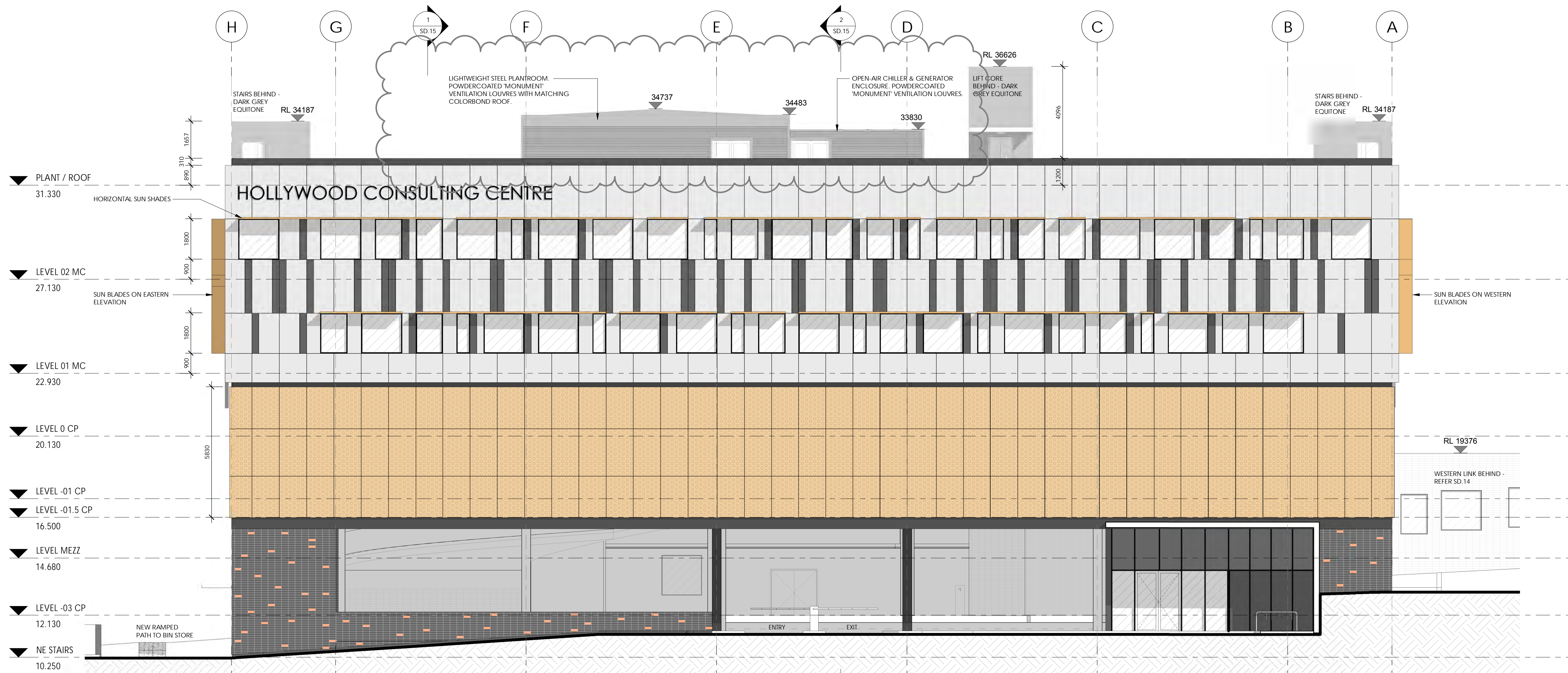


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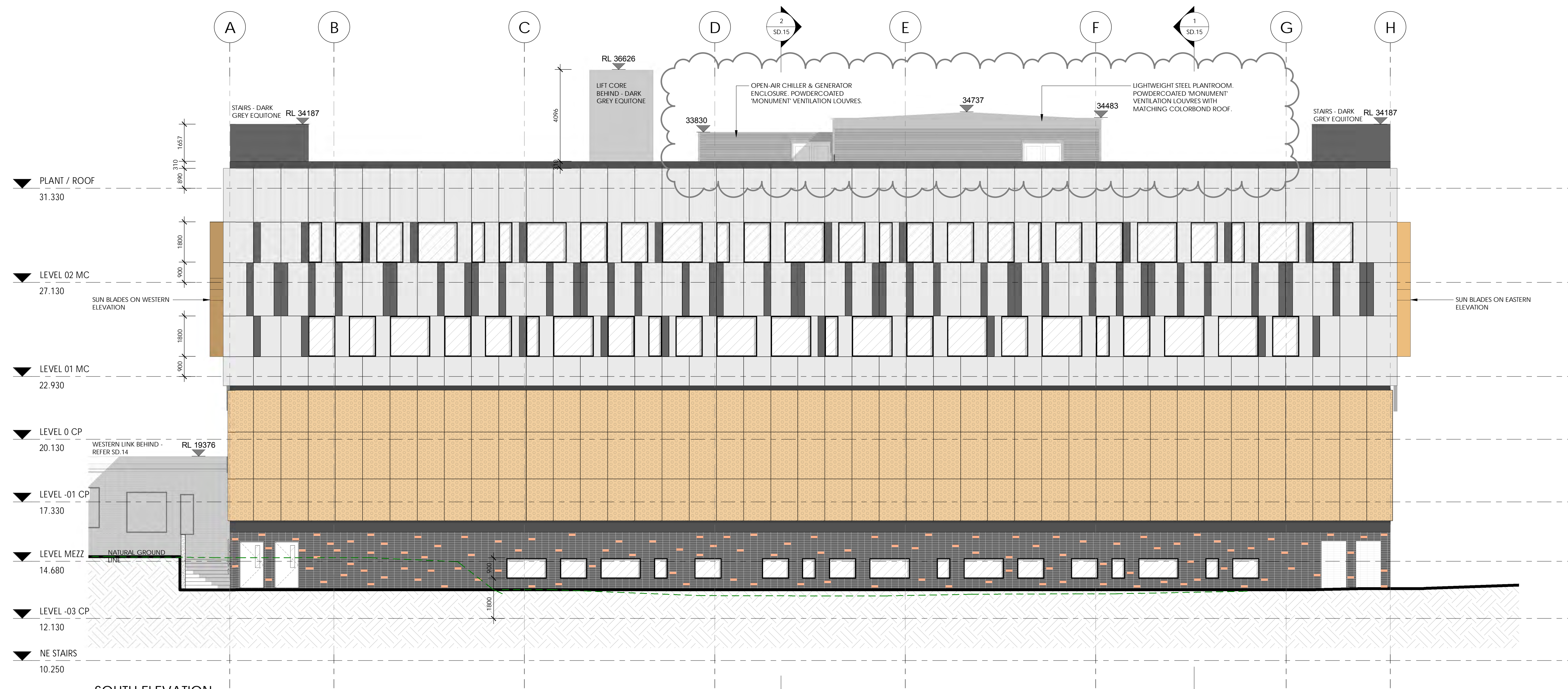
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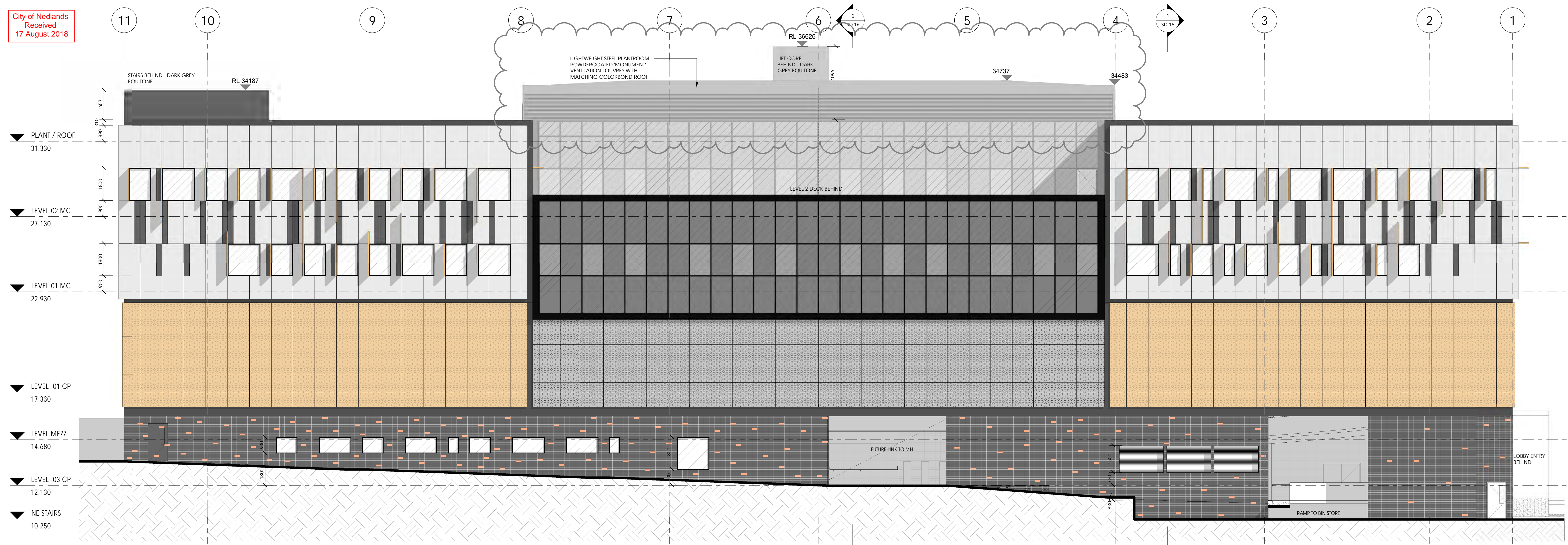
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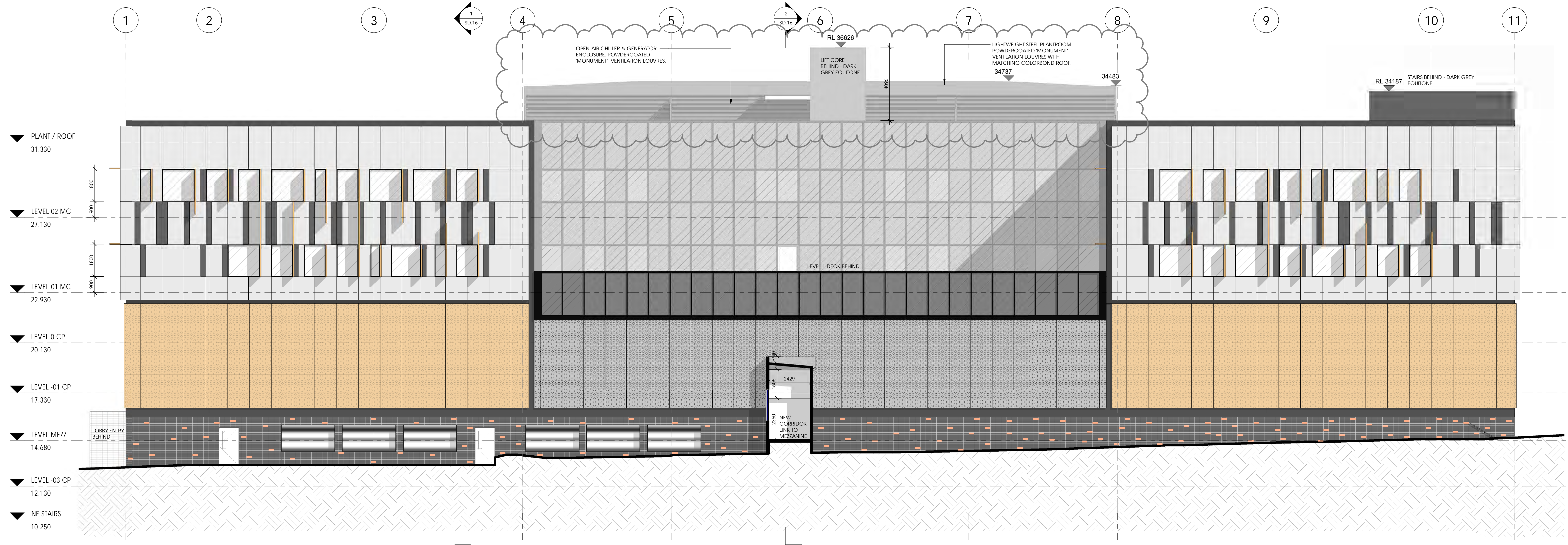
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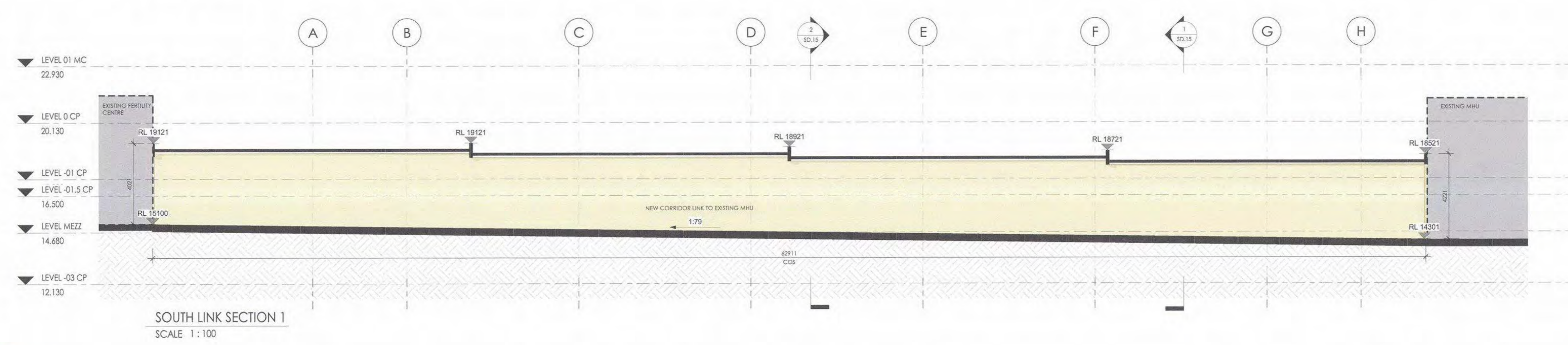
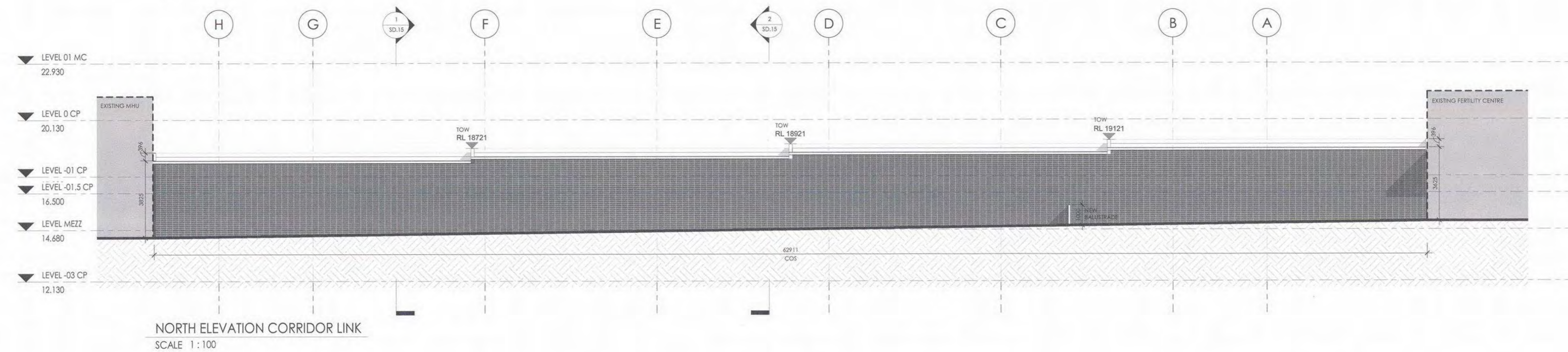
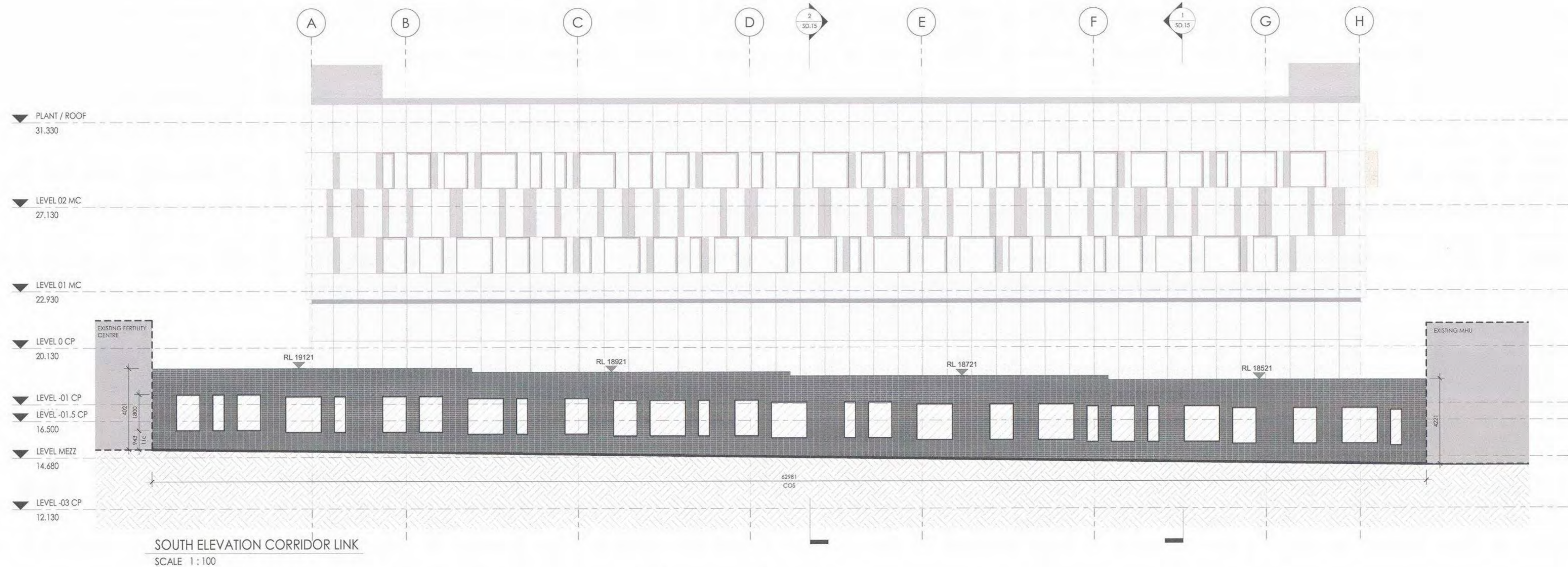


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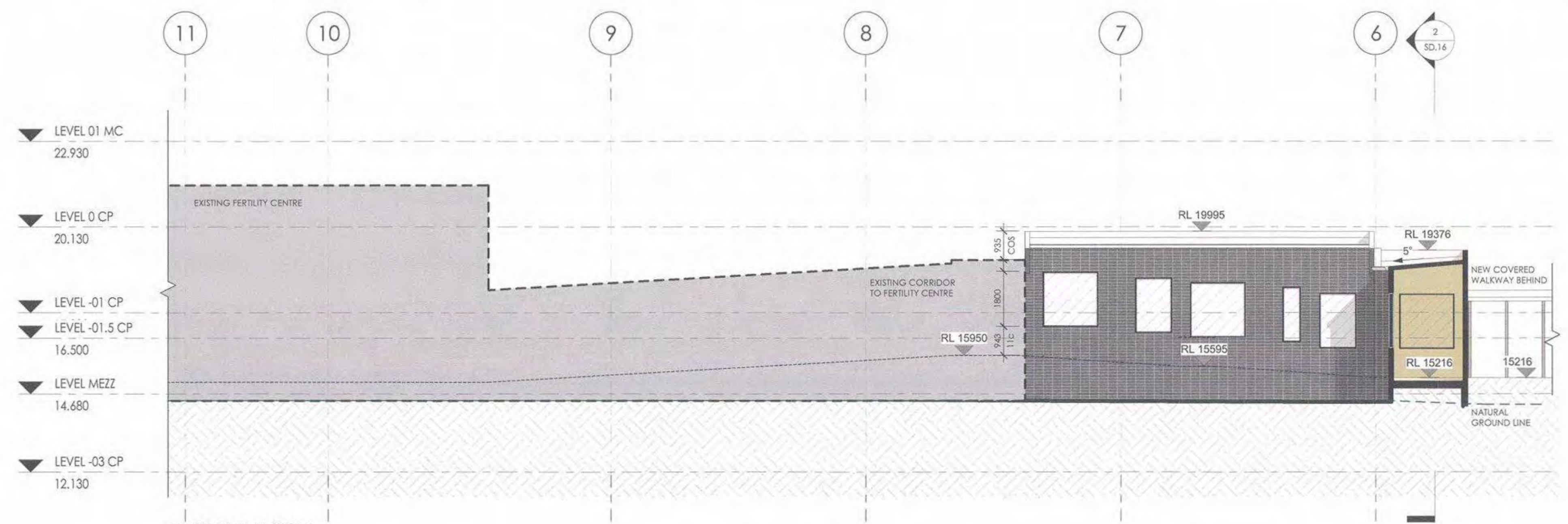
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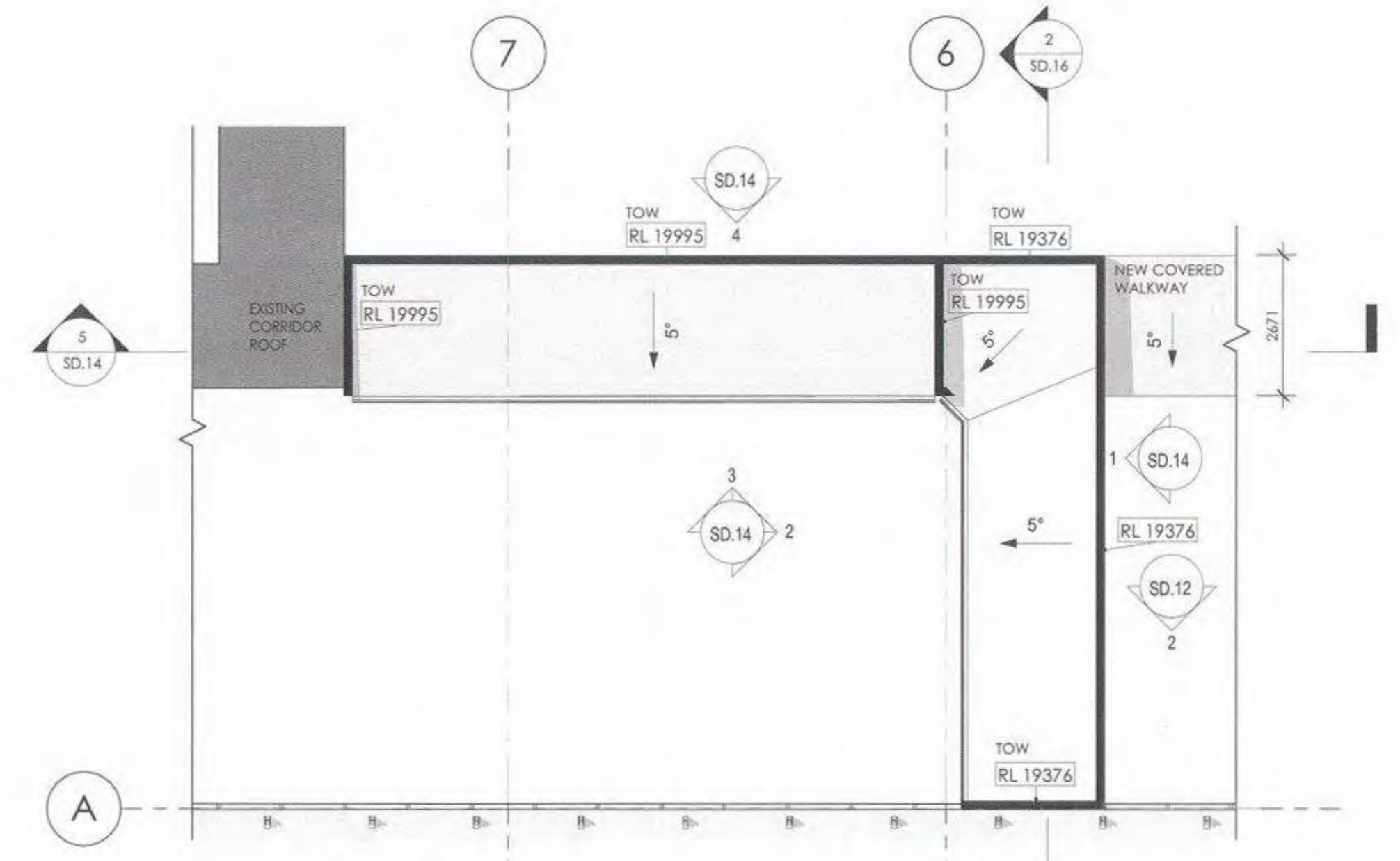




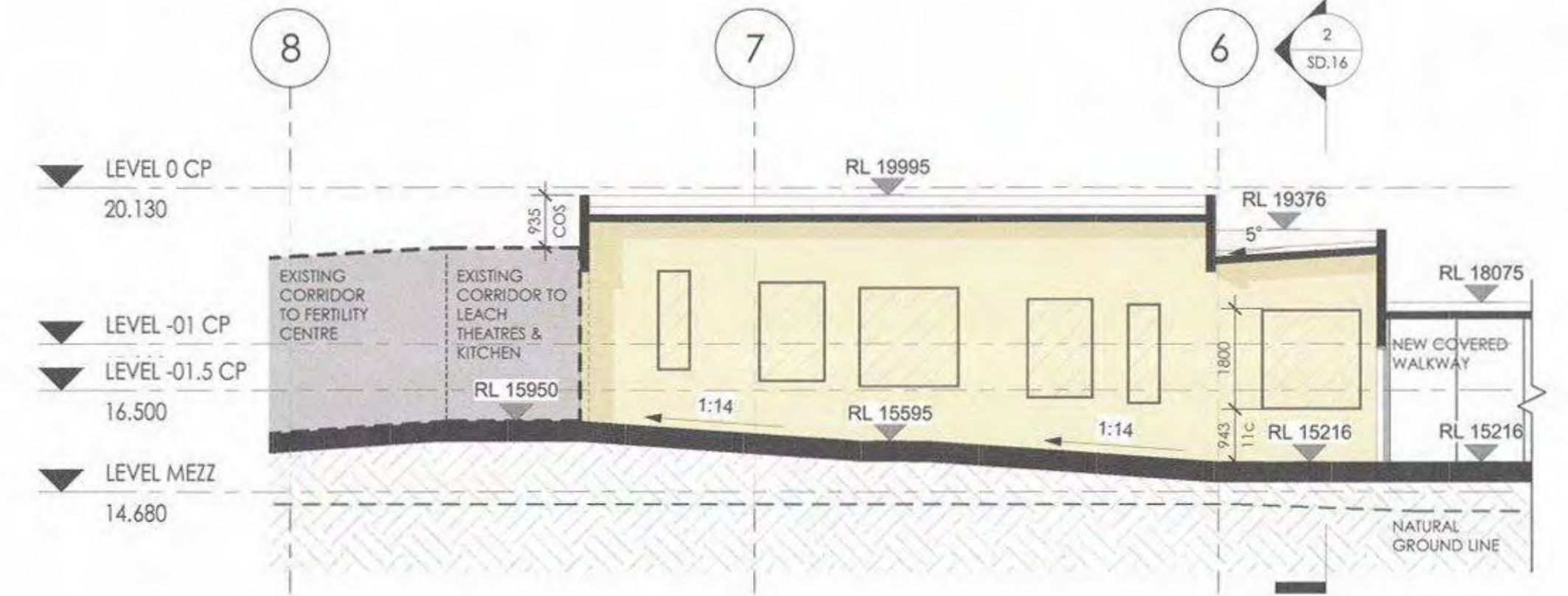
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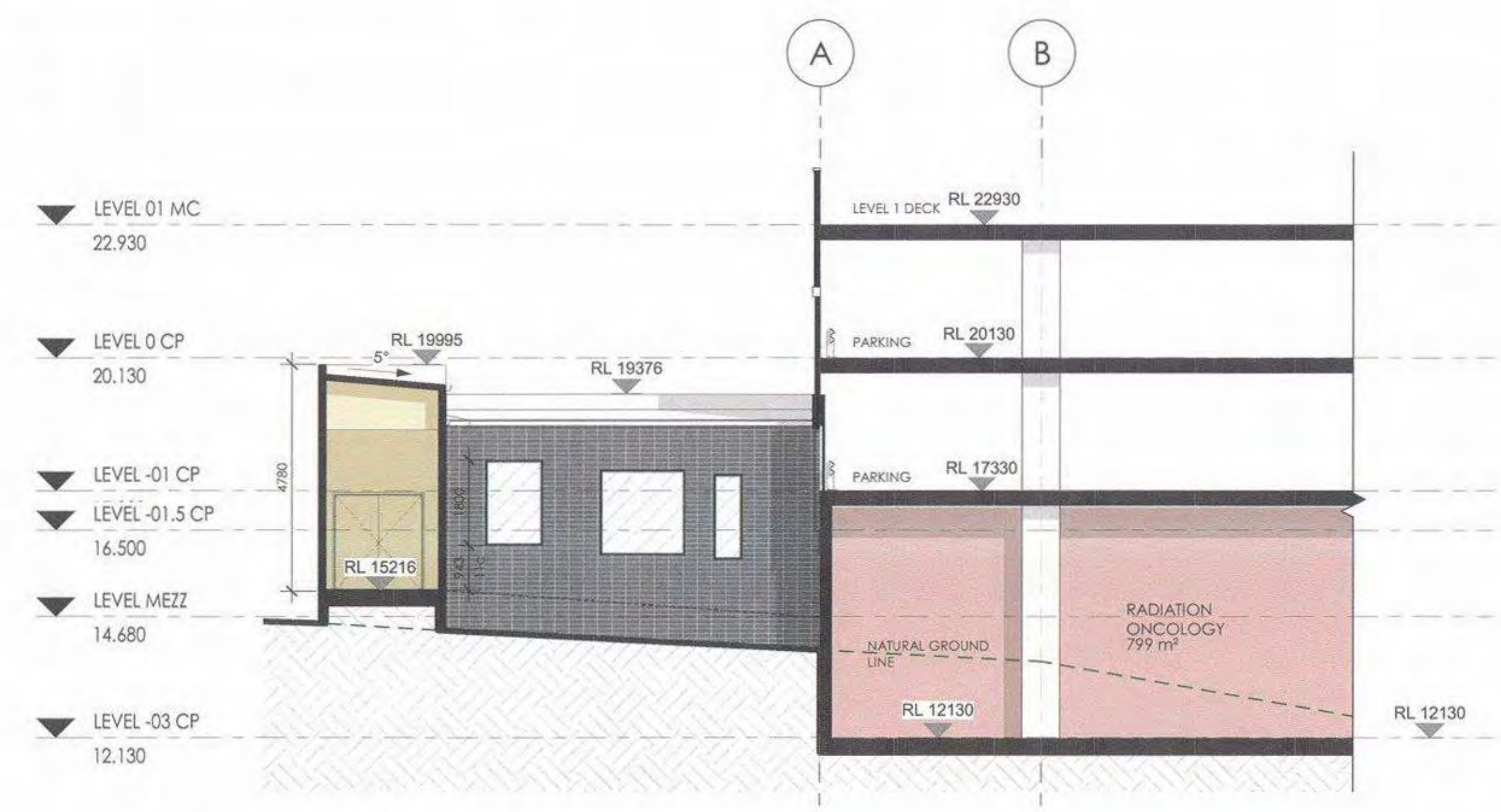
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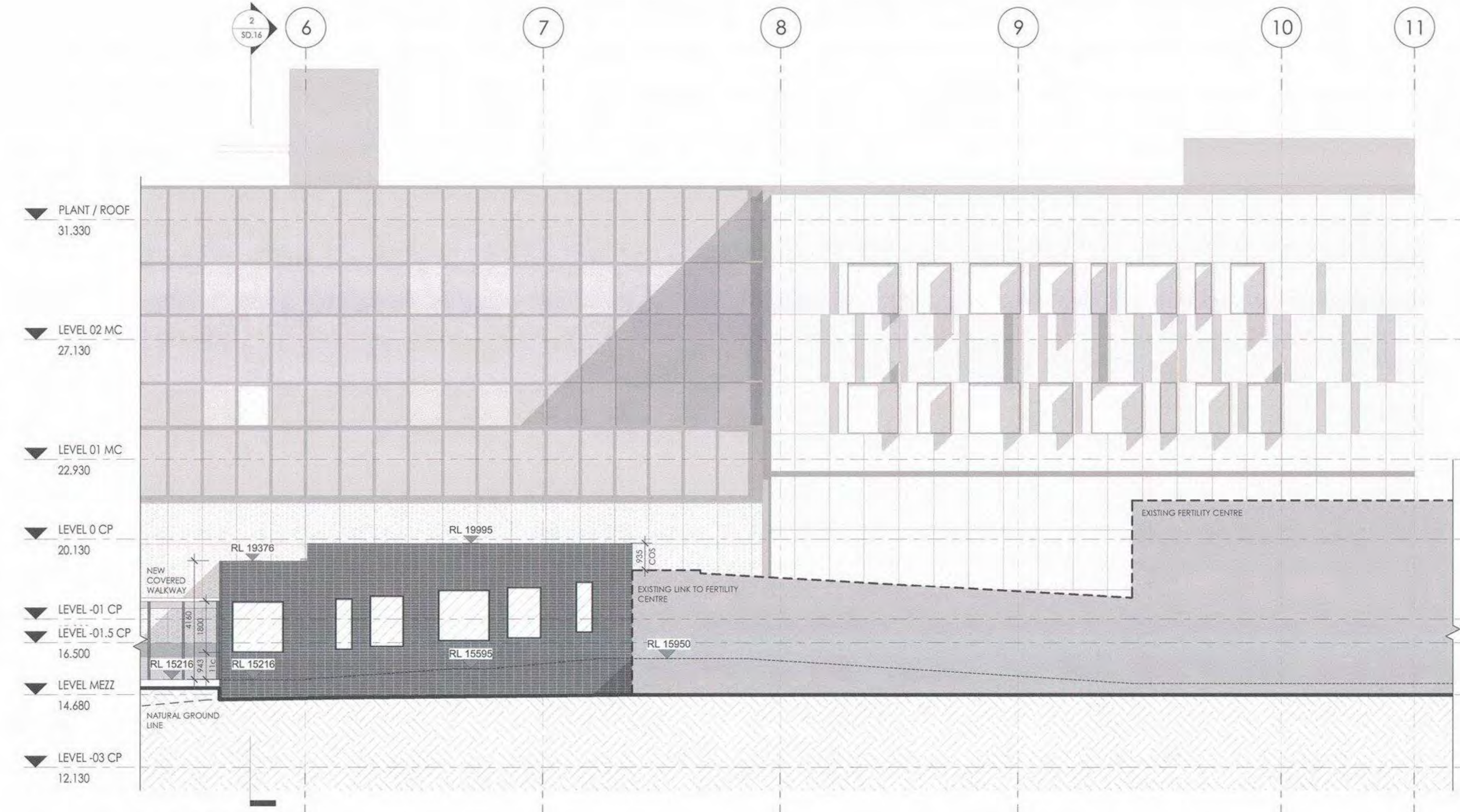
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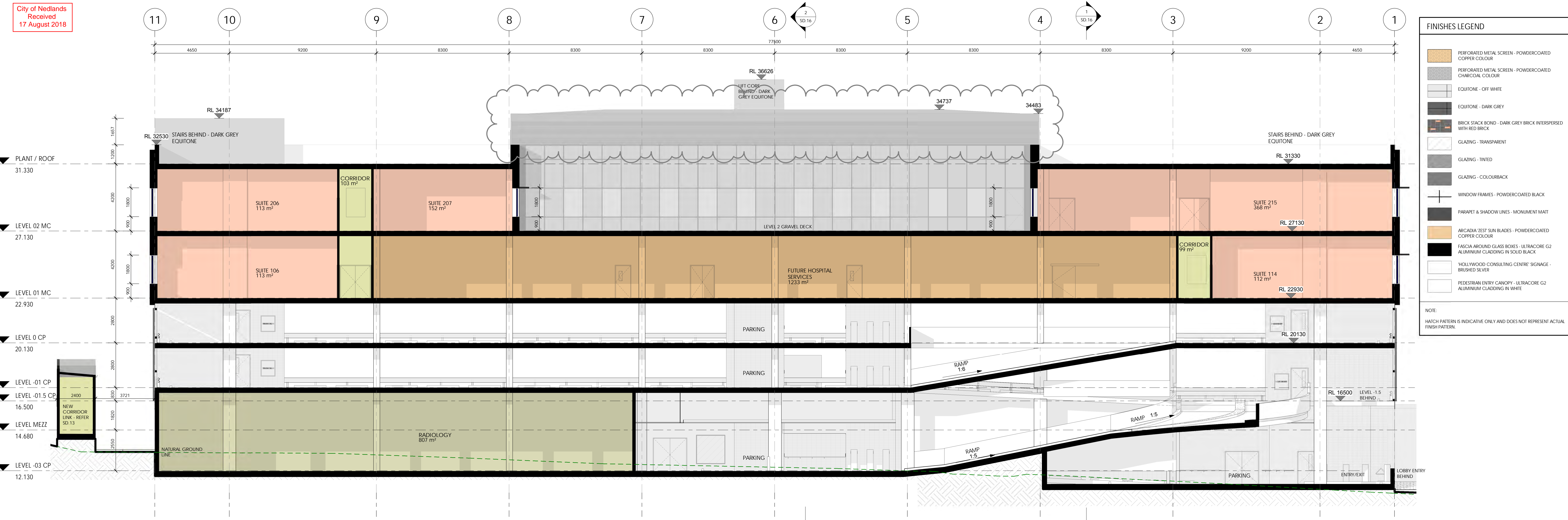
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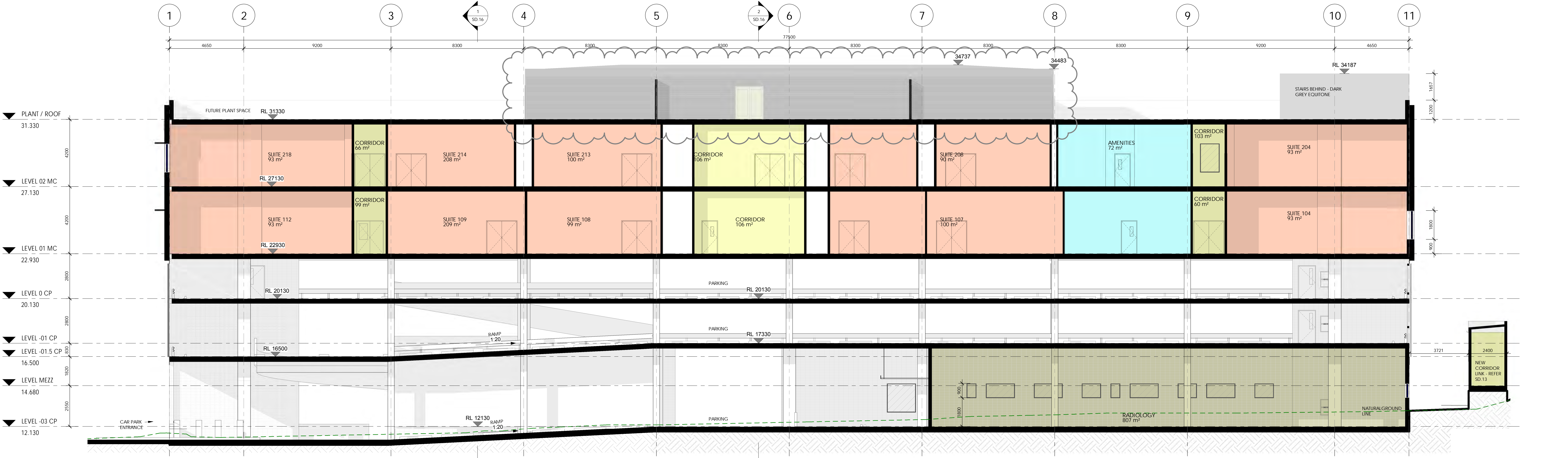
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NORTH-SOUTH SECTION 1 - PARKING RAMP
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NORTH-SOUTH SECTION 2
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SECTIONS
HPH MEDICAL CENTRE AND CARPARK

LOT 564 MONASH AVENUE, NEDLANDS

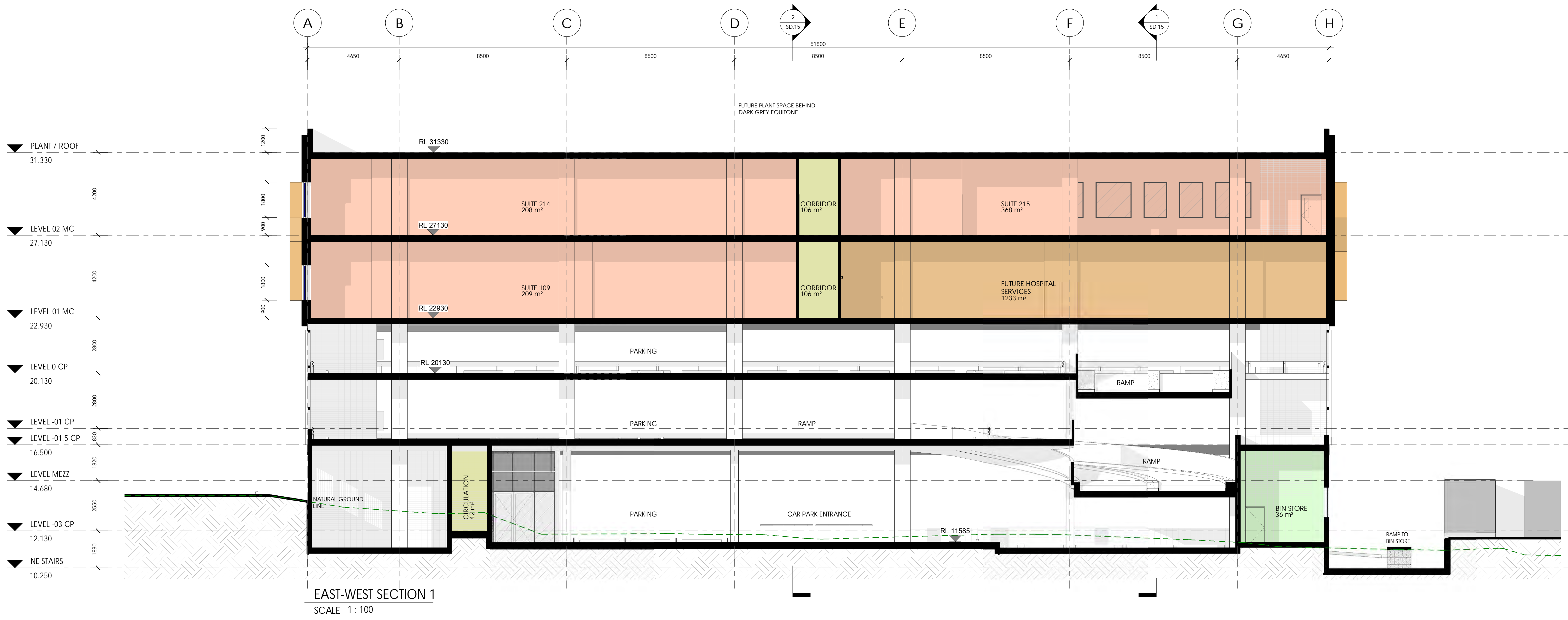
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17 August 2018

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SECTIONS
HPH MEDICAL CENTRE AND CARPARK

LOT 564 MONASH AVENUE, NEDLANDS

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Government of **Western Australia**
Department of **Transport**

Our ref: DT/15/05084
Enquiries: Yohan Nugraha 6551 6103

Kate Bainbridge
Coordinator Statutory Planning
City of Nedlands
PO Box 9
Nedlands WA 6909

Dear Ms Bainbridge

RE: 101 MONASH AVE - HOLLYWOOD HOSPITAL MEDICAL CENTRE

Thank you for your email dated 18 July 2018 requesting comment on the proposed Hollywood Private Hospital (HPH) medical centre development. We have reviewed the proposal and advise we have no objection subject to appropriate management of parking at the site.

The HPH Masterplan 2013 outlines a maximum limit of 1800 parking bays for the site. As indicated in Cardno's letter dated 8 August 2018, the current parking provision at the site is 1,520 bays with 264 nett new bays proposed. The proposed parking expansion to a total of 1,784 bays is consistent with the established parking limit.

We recommend that the following conditions be included in the final recommendation:

- Prior to occupation of the development, a Travel Behaviour Change Plan is to be prepared and implemented to the satisfaction of the City of Nedlands on the advice of the Department of Transport.
- Prior to occupation of the development, a Parking Management Plan is to be prepared and implemented to the satisfaction of the City of Nedlands on the advice of the Department of Transport.

HPH has advised it is committed to implement a comprehensive paid parking system from January 1st, 2019. Any approval should contain an advice note addressing the Departments expectation that staff parking charges at HPH will match the QEII Medical Centre's staff parking charges within 3 years.

Should you wish to discuss this advice further, please feel free to contact Yohan Nugraha on 6551 6103 or via email at Yohan.nugraha@transport.wa.gov.au

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Martin Keen'.

Martin Keen
A/Principal Transport Planner

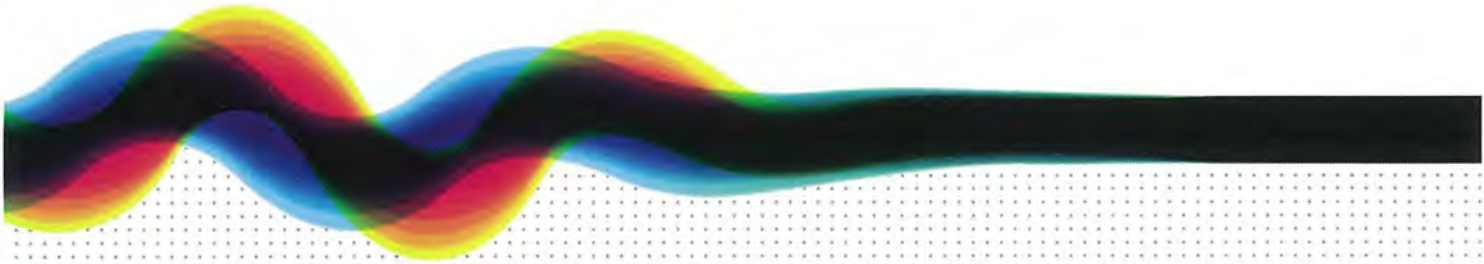
20/8/2018
Cc: Michael Daymond (DPLH)

Lot 564 (No. 101) Monash Avenue, Nedlands

Development Application: Hollywood Consulting Centre

July 2018 | 717-356

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Document ID: PG Planning/PG 2017/717-356 Nedlands, Hollywood Hospital, Car Parking DA/7 Final Documents/1 Lodged/FINAL Lot 564 (No. 101) Monash Avenue, Nedlands Development Application- Hollywood Consulting Centre.indd

Issue	Date	Status	Prepared by		Approved by	
			Name	Initials	Name	Initials
1	06.07.18	Draft	Alison Healey		Aaron Lohman	
2	06.07.18	Final	Alison Healey	AH	Aaron Lohman	AL

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Introduction

This report has been prepared by **element** on behalf of Ramsay Hospital Holdings Pty Ltd (Ramsay Health Care) in support of a development application for additions to the Hollywood Private Hospital, 101 Monash Avenue, Nedlands. The application seeks approval for a stand-alone, five-storey consulting centre, to be known as the 'Hollywood Consulting Centre'. The development comprises a number of consulting suites, oncology facilities and future hospital services, as well as additional car parking.

Ramsay Health Care are continually seeking to improve its medical facilities and service offerings at the Hollywood Private Hospital and this development application aims to facilitate the redevelopment of buildings that are reaching the end of their economic life. This report outlines the details of the subject site, the State and local planning framework applicable to the proposal, and provides a detailed planning assessment against the various statutory and policy provisions. Justification is then provided for those aspects of the proposal that require the exercise of discretion.

Summary of Application

The site and application particulars are summarised in the following table:

Address	101 Monash Avenue, Nedlands
Lot on Plan	Lot 564 on DP 63425
Certificate of Title (Vol/Fol)	2735/137
Lot Area	10,6158 sqm
Metropolitan Region Scheme	Urban
City of Nedlands Town Planning Scheme No. 2	Special Use
Master Plan	Hollywood Private Hospital Master Plan
Existing Land Use	Private Hospital and ancillary medical facilities
Surrounding Land Use (Zones/Reserves)	Residential, Public Purposes – Hospital and Primary School, Recreation
Nature of Proposed Development	Hospital addition (Hollywood Consulting Centre)
Land Use Permissibility	Consistent with Special Use: Hospital and ancillary facilities; and Aged persons housing and frail aged persons hotel.
Draft City of Nedlands Local Planning Scheme No. 3 (draft for advertising December 2017)	Special Use (SU1): Hospital Other uses associated with the Hospital are permitted provided they are "I" incidental uses. Conditions: All development and uses are to be consistent and not detrimental to the primary function of the area being medical and hospital related.

About Ramsay

Ramsay is a leading and respected provider of health care services throughout Australia and its international market. Ramsay's facilities, including the Hollywood Private Hospital, cater for a broad range of health care needs including day procedures, complex surgery, pathology, radiology, allied health services and rehabilitation. Ramsay's values are centered around 'people caring for people' and are committed to ongoing improvement of patient care in all areas to ensure Ramsay remains at the forefront of health care delivery.

Whilst the Hospital has been there since 1947, Ramsay has been part of the Nedlands community for over 24 years and has embarked on a significant investment programme to ensure that the wider community is provided with the highest quality of service possible. With the now Regis Aged Care site opposite, an aging community and a growing population, the need for good quality health care in the local community is increasing. It is essential that Ramsay remain at the forefront of health care, including the provision of a dedicated consulting, hospital services and oncology clinic as proposed.



Subject Site

Description

The subject site is described as Lot 564 (No. 101) Monash Avenue, Nedlands and comprises an area of 10,6158 sqm. The area subject to this development application is located centrally, towards the north of the subject site as shown in the site development plan.

The subject site is located with the Hollywood Private Hospital approximately 6km southwest of the Perth City Centre and forms part of a wider medical and health precinct straddling the municipal areas of City of Nedlands and City of Perth. The site is bound by Verdum street to the north, Monash Avenue to the south, Hollywood Primary School to the west and Queen Elizabeth II Medical Centre Campus to the east.

Refer to Figure 1 – Location Plan

The particulars of the Certificate of Title are summarised in the following table and a copy of the Title is provided in Appendix 1.

Lot	Deposited Plan	Vol/Fol	Landowner
564	63425	2735/137	Ramsay Hospital Holdings Pty Ltd

Refer to Figure 2 – Site Plan

Refer to Appendix 1 – Certificate of Title

Context

The subject site is located approximately 1 kilometre north of the University of Western Australia Crawley campus is highly accessible with major bus routes servicing Monash Avenue and with regional roads including Stirling Highway and Winthrop Avenue in close proximity.

Hollywood Private Hospital caters for a broad range of health care needs including day procedures, complex surgery, pathology, radiology, allied health services and rehabilitation. The Hospital campus currently consists of a variety of at-grade and multi-storey parking facilities that serve multiple medical and specialist centres, a development and training centre, and the main hospital and its wings. An internal sealed road network traverses the hospital allowing safe private vehicle, service vehicle and pedestrian movement.

Refer to Figure 3 – Aerial Plan

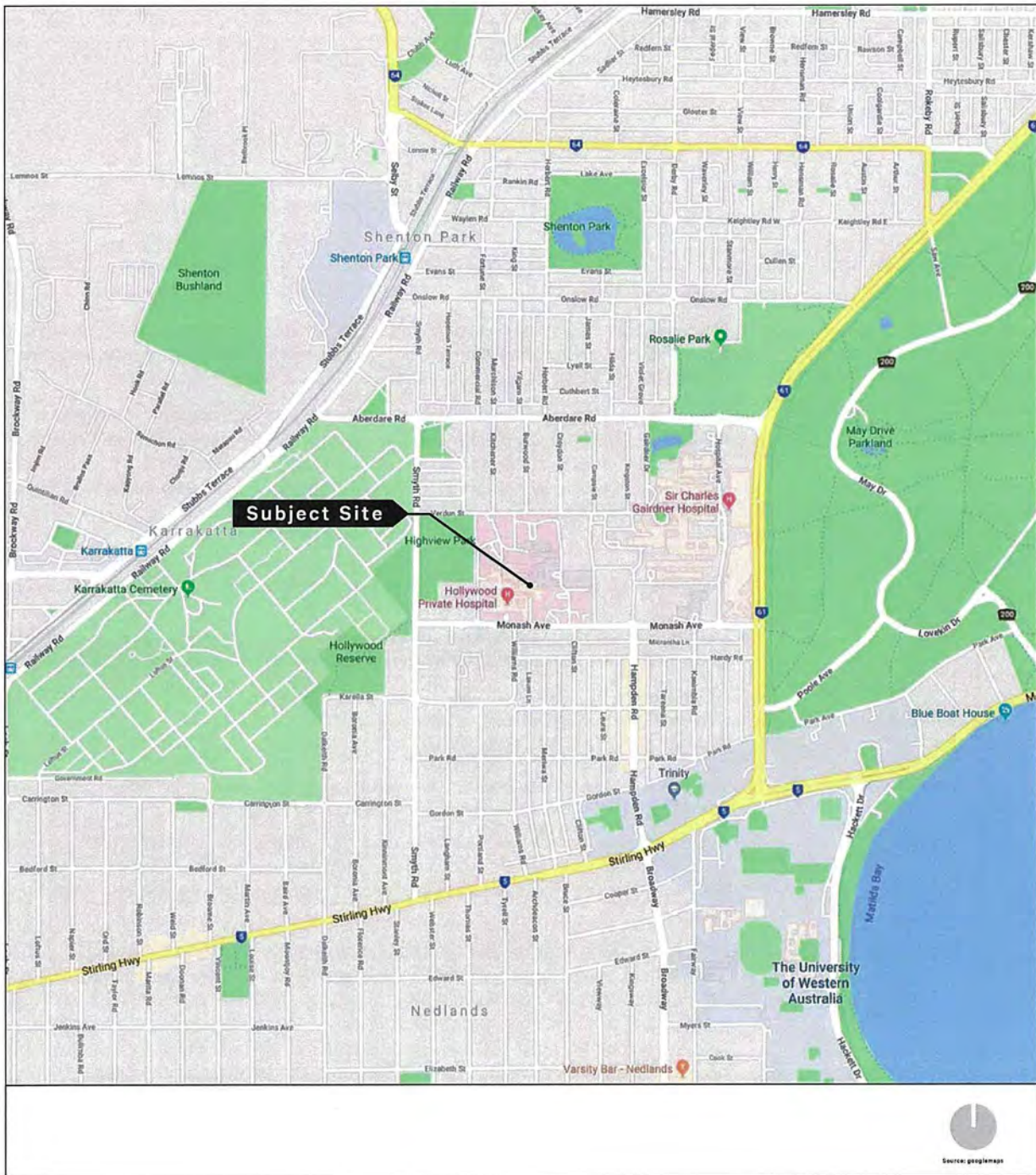


Figure 1. Location Plan

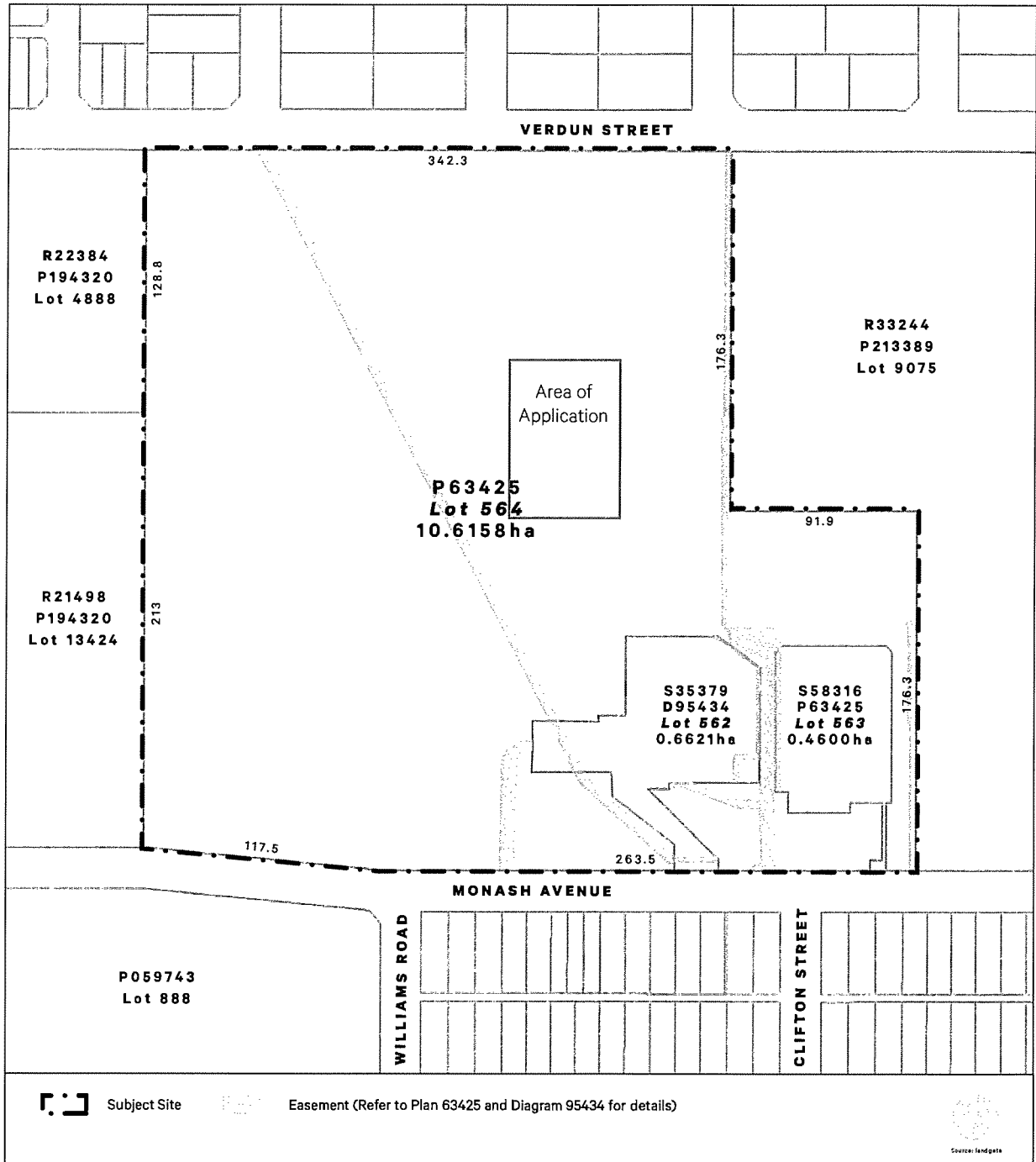


Figure 2. Site Plan

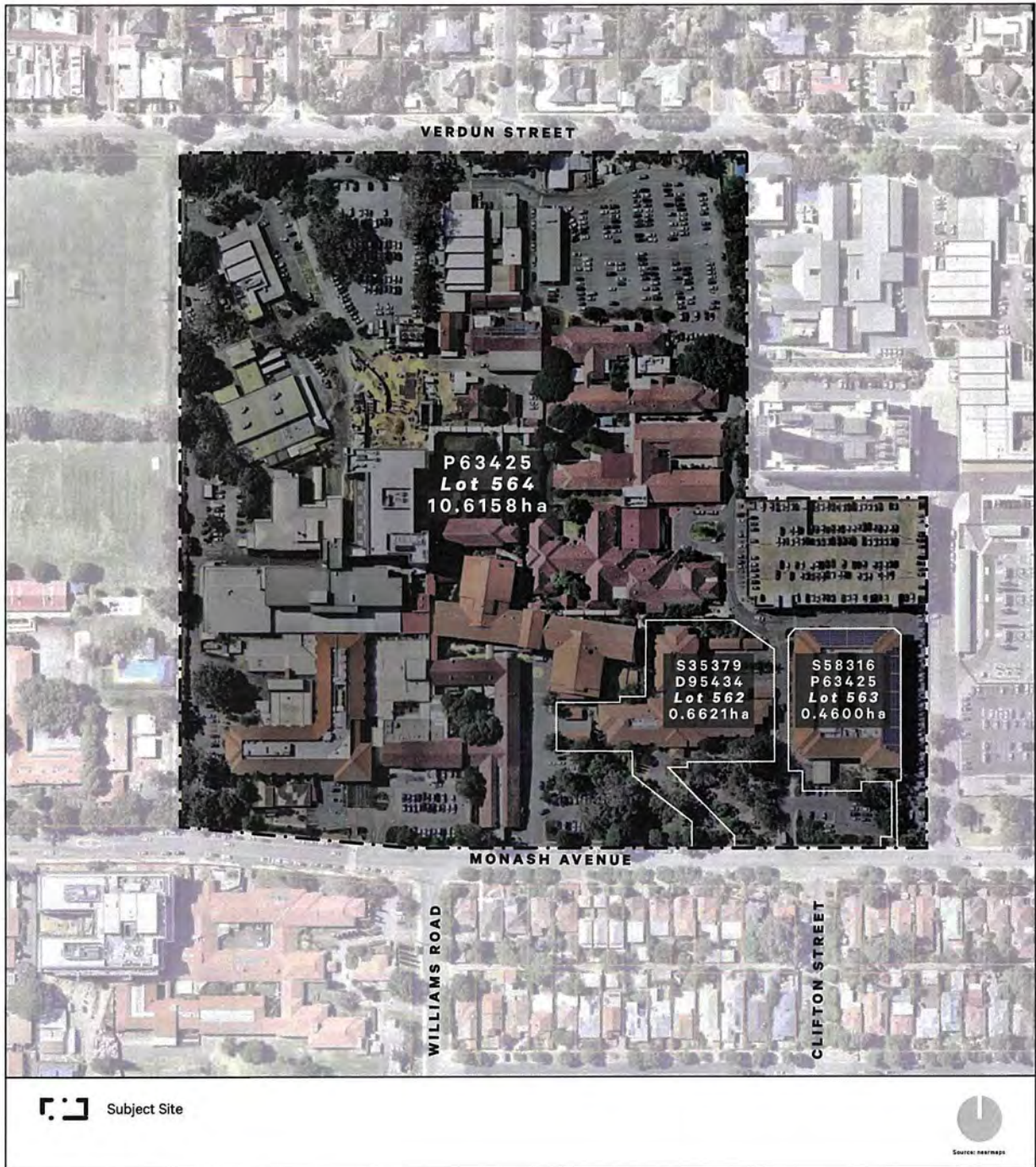


Figure 3. Aerial Plan

Planning Framework

State Planning Framework

Perth and Peel @ 3.5 Million

Released by the Western Australian Planning Commission (WAPC) in March 2018, the latest strategic document for the Perth Metropolitan Region is Perth and Peel @ 3.5 million which includes a range of land use planning and infrastructure frameworks. The framework is intended to guide development within Perth in order to effectively accommodate a population of 3.5 million by 2050. The framework builds upon core concepts and objectives identified in Directions 2031 and Beyond, the State's previous land use strategy. The framework divides the metropolitan area into four sub-regions with the subject site being located within the central sub-region. Accordingly, the site is subject to the Central Sub-regional Planning Framework.

The proposed development is in accordance with the principles underlying the Central Sub-regional Planning Framework, as it:

- Achieves a more consolidated urban form and development within the sub-region by locating medical services within a designated activity centre;
- Brings people within easy reach of new hospital facilities and makes better use of available space by creating high-quality facilities and amenity; and
- Promotes investment into large-scale operational facilities within development hot spots.

Metropolitan Region Scheme

The Metropolitan Region Scheme (MRS) is the overarching statutory planning mechanism governing the Perth Metropolitan region. It sets out broad land use zones and allocates areas for regional open space and other infrastructure purposes. Under the MRS, the subject site is zoned 'Urban'- inclusive of residential, commercial, recreational and light industry land uses, applicable to the subject site.

Refer to Figure 4 – Metropolitan Region Scheme

State Planning Policy 4.2 Activity Centres for Perth and Peel

State Planning Policy 4.2 Activity Centres for Perth and Peel (SPP 4.2) was designed to specify broad planning requirements for the planning and development of new activity centres, as well as the redevelopment and renewal of existing centres in Perth and Peel.

SPP 4.2 defines an Activity Centre as follows:

"Activity Centres are community focal points. They include activities such as commercial, retail, higher-density housing, entertainment, tourism, civic/community, higher education, and medical services. Activity Centres vary in size and diversity and are designed to be well-served by public transport."

SPP 4.2 identifies the subject site as being located within the UWA-EOII Specialised Activity Centre with health, education and research as the primary function. Specialised activity centres focus on regionally significant economic or institutional activities and often require, and are provided with, high level transport accessibility. The proposed development is in accordance with SPP 4.2 as the proposed development will improve the offering of contemporary medical and health services within a highly accessible and strategically-recognised activity centre.

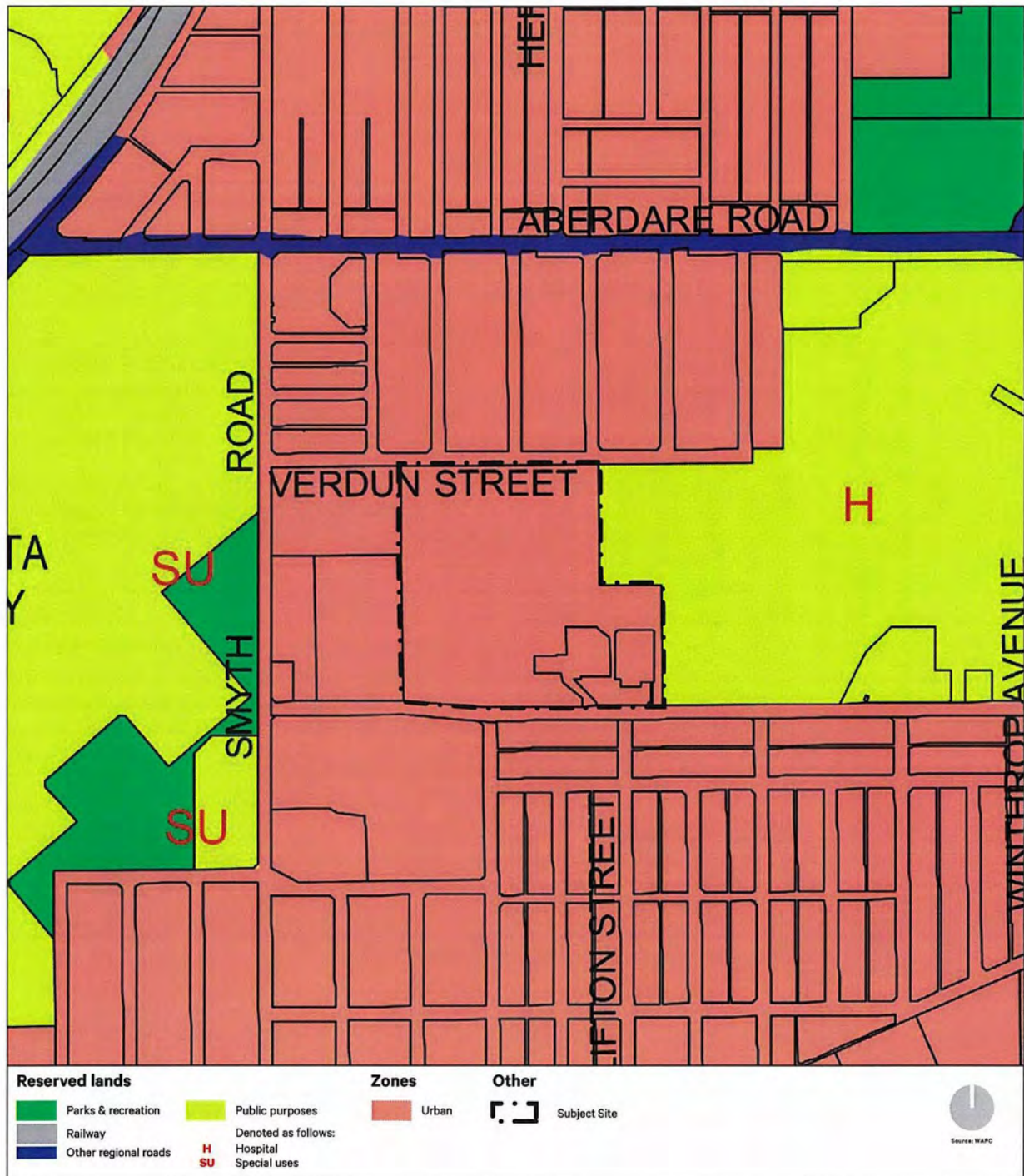


Figure 4. Metropolitan Region Scheme

We also understand the Department of Planning, Lands and Heritage is in the preliminary stages of coordinating a Specialised Activity Centre Plan (SACP) for the UWA-QEII Specialised Activity Centre, which is intended to be prepared in collaboration with the relevant stakeholders, including integrating the master planning processes underway (at various stages) by UWA and QEII. This proposed development will not prejudice the planning of the wider 190-hectare precinct and Ramsay will be a key stakeholder in the preparation of the SACP.

WAPC Development Control Policy 1.6 – Planning to Support Transit Use and Transport Oriented Development

WAPC Development Control (DC) Policy 1.6 – Planning to Support Transit Use and Transit Oriented Development seeks to ensure that planning takes into account the opportunities created by the provision of public transport. The Policy applies throughout the state within transit oriented precincts, as defined under the Policy.

Under DC Policy 1.6 transit oriented precincts are defined as areas being within:

- An 800m walkable catchment for railway stations, transit interchanges or major bus transfer stations or terminals; or
- A 400m walkable catchment for bus stops located on a bus routes with multiple high frequency bus services during peak periods.

The subject site is located within 400m of high frequency bus routes. As such, the site is located within a transit oriented precinct, as defined under DC Policy 1.6. Relevant objectives of DC Policy 1.6 are as follows:

- *“To promote and facilitate the use of public transport as a more sustainable alternative to the private car for personal travel, to enhance community accessibility to services and facilities, including employment opportunities, community services and recreational facilities, and to improve equity in accessibility for those who do not own or have access to a car.*
- *To encourage spatial patterns of development that make it easier to plan and efficiently operate public transport services, and for the existing and potential users of public transport to access those services.*
- *To encourage balanced public transport rider-ship along transit corridors by creating places that are destinations as well as points of departure.*
- *To ensure the optimal use of land within transit oriented precincts by encouraging the development of uses and activities that will benefit from their proximity and accessibility to public transport, and which will in turn generate a demand for the use of transit infrastructure and services.*
- *To ensure that opportunities for transit supportive development are realised, both on public and privately-owned land, and that transit infrastructure is effectively integrated with other development, to maximise safety, security and convenience for transit users.*
- *To promote and facilitate walking and cycling within transit oriented precincts by establishing and maintaining high levels of amenity, safety and permeability in the urban form, and to promote and facilitate opportunities for integrating transport modes by creating opportunities for convenient, safe and secure mode interchange”.*

The proposed development is consistent with the aims and intent of DC Policy 1.6 in terms of ensuring the better use of land within transit oriented precincts. Major bus routes running along Monash Avenue will connect visitors and offer affordable and convenient transport to the new consulting centre facility. The design of the building is of high quality and holds high levels of amenity to produce an attractive urban form that is designed for convenience and safety of both its staff and patients. The development will ultimately increase the range of facilities and services available at Hollywood Private Hospital, making the Hospital a major destination for more public transport users.

Local Planning Framework

City of Nedlands Local Planning Strategy

The City of Nedlands Local Planning Strategy (LPS) was endorsed by the Western Australian Planning Commission (WAPC) in September 2017. The Strategy represents the City's current view, providing framework and direction to ultimately support the operation of the draft Local Planning Scheme No. 3 (discussed below).

The LPS applies a number of general guiding principles, including the following considered relevant to the proposal:

- To develop and support a hierarchy of activity centres;
- To integrate land uses and transport systems;
- Facilitate improved multi-modal access into and around the district;
- Facilitate good public health outcomes;
- Encourage local economic development and employment opportunities; and
- Facilitate efficient supply and use of essential infrastructure.

Under the LPS, the subject site is identified as being within the UWA-QEII Specialised Centre and adjacent to urban growth areas and high frequency bus routes. The proposed consulting centre will contribute to the medical related nature of the activity centre and support its hierarchy and catchment.

City of Nedlands Town Planning Scheme No. 2

The subject site is zoned 'Special Use' under the City's Town Planning Scheme No. 2 (TPS No. 2). Clause 3.10 of TPS2 states:

"No person shall use land or any building or structure thereon in a Special Use Zone, except for the purpose set against that land in Schedule 5 and subject to compliance with any conditions specified in the Schedule with respect to the land".

Schedule 5 of TPS2 stipulates permitted uses and provisions applying to special use sites. The subject site is referred to as Hollywood Repatriation Hospital located on Monash Avenue in Nedlands. The following permitted uses are described:

- (i) *"Hospital and ancillary facilities; and*
- (ii) *Aged persons housing and frail aged persons hotel, subject to being advertised in accordance with the provisions of Clause 6.3.3 and 6.3.4.*
- (iii) *The development of the site shall be in accordance with the current Master Plan applicable to the Special Use Zone as approved by Council from time to time, following the procedures set out in Clause 8.3 of the Scheme".*

Refer to Figure 5 – Town Planning Scheme No. 2

The proposed Hollywood Consulting Centre is integrated with, and an extension to, the permitted Hospital use with ancillary facilities including car parking. The proposed development is therefore consistent with land use requirements outlined in TPS2.

Draft City of Nedlands Local Planning Scheme No. 3

Under the Draft City of Nedlands Local Planning Scheme No.3 (LPS3), as advertised, the subject site remains zoned as 'Special Use' with the objectives to:

- *Facilitate special categories of land uses which do not sit comfortably within any other Zone.*
- *To enable the Council to impose specific conditions associated with the special use.*



Figure 5. Town Planning Scheme No. 2

The Scheme refers to the Hollywood Hospital as Special Use Zone No.1 (SU1). Land uses permitted includes Hospital uses and any other uses associated, provided they are incidental uses. Conditions affecting development in SU1 outlined in Table 6 of the draft Scheme are:

1. All development and uses are to be consistent and not detrimental to the primary function of the area being medical and hospital related.

Element have been in discussions with the City of Nedlands with regard to its submission on draft LPS3 made on behalf of Ramsay Health Care. The proposed consulting centre use is consistent with the draft LPS3 provisions.

Hollywood Private Hospital Masterplan

The Hollywood Private Hospital Masterplan was adopted in 2013 to guide future redevelopment and expansion of the site. The Masterplan aims to ensure anticipated growth is sustainable and meets the health and wellbeing needs of the surrounding community through improved facilities and services. The Masterplan outlines a series of improvements and development initiatives to be contemplated as part of the site's redevelopment over the long-term.

The overall vision for the site set by the Masterplan is to:

Develop a distinctive and attractive campus that capitalises on its existing natural, building and heritage assets to uniquely position itself within the region.

An assessment of the proposed development against the Masterplan is provided below.

Proposed Development

Overview

Designed by Silver Thomas Hanley, this development application seeks approval for a stand-alone five-storey consulting centre comprising:

- 33 consulting suites (ranging between 93sqm– 366sqm in size);
- Radiology (805sqm) and Radiation Oncology (799sqm);
- Future hospital services (1,234sqm);
- 260 car bays (including 6 ACROD) within the building's confines plus 57 at-grade car bays;
- Building services and facilities include bathrooms, generator, HV substation and LV switch room, storage, server rooms and bin stores; and
- End of trip facilities.

The ground level (Level -3) comprises the radiology centre and radiation oncology and car parking, with additional car parking located on the following two levels (Level -1 and Level 0). The upper levels contain consulting suites (Levels 01 and 02) and future hospital services (Level 01). A covered pedestrian walkway is proposed as a mezzanine level (Level -1.5) between Levels -3 and -1 and provides direct connection with the Hospital's existing Fertility Centre, Leach Theatres and Kitchen. Building services and amenities are positioned appropriately on all five floors.

Refer to Appendix 2 – Development Plans

Demolition of the following structures will be required in order to facilitate development:

- McCarthy Ward;
- Day Rehabilitation;
- Engineering, Furniture and Linen Store;
- Frederick Bell Ward; and
- Some at-grade parking bays (replaced in alternate location).

The structures mentioned above have reached the end of the economic life and will make way for a state-of-the-art medical facility.

The proposed Hollywood Private Hospital Consulting Centre and car park will be a Strata Development with a new green title lot being established (which will be created via a separate and subsequent application for tenure and management purposes).

Refer to Demolition Plan contained within Appendix 2 – Development Plans

Site Planning and Massing

The proposed Hollywood Consulting Centre is located centrally and immediately north of the Hollywood Clinic. The new building will be integrated into the surrounding built environment, abutting other hospital buildings. The five-storey building presents as appropriate height within its setting being consistent with the surrounding built form, land use and intended redevelopment building height in accordance with the site's Masterplan. Notwithstanding, the proposed building has been architecturally designed to address perceived building bulk. Levels above the podium contain voids on either side creating interesting and articulated facades, discussed further below.

Design Philosophy: Architectural Statement

Building Overview

As mentioned, the Medical Centre is a five-storey stand-alone building, accommodating medical consulting tenancies, a future hospital service (likely Gastro Day Procedures Department), Oncology and Radiology departments, and 317 car parking bays (260 internal and 57 external).

A new access driveway to service the new car park will be constructed off the existing main internal driveway running along the east of the site. The works will also include soft and hard landscaping surrounding the new building. The Consulting Centre will be connected via a small link corridor to the existing hospital corridors to the west of the site. This link will provide access to and from the hospital. In addition, a new link corridor shall be constructed to the south of the new building, to replace the demolished link between the main hospital and the existing Mental Health Unit to the east. This link corridor allows for catering and hotel services to the existing Mental Health Unit.

Façade Materiality

The proposed Consulting Centre and car park building consists of a contemporary material palette, reflective of the scale and use of the building. It captures common elements of other buildings within the site particularly the recently completed new ward block (Anne Leach Wing), while maintaining its own distinct identity. The building composition is essentially a consulting centre on top of a car park. The elevations have been designed as three primary elements:

1. a podium – dark toned and set back from the front façade
2. a decorative perforated metal screened carpark – for natural light and ventilation
3. a lightweight clad façade

The podium level of the building (Level -3) utilises a blended charcoal grey/red stack bond face brick construction podium. The face brick façade is a contextual link with many of the existing older buildings on the site. A powder-coated copper coloured perforated metal screen wraps around the upper two levels of carparking (Levels -1 and 0). The copper colour was selected as the unique element within this building, providing it with its own identity. This warm, metallic colour softens the façade, and acts as a highlight, with the colours of the bricks below and cladding panel façade above. The screen allows for natural ventilation through the car park, as well as acting as a full height barrier for safety. A separate crash barrier for vehicles will be provided.

The upper two levels of the building, accommodating the consulting suites and future hospital services are clad in a lightweight cladding such as pre-finished Equitone fibre cement panels. This material was also used for some elements in the new theatre expansion, currently under construction. The matt, earthy texture of the Equitone cladding complements and enhances the metallic highlights within the design of the façade. Large windows are punched out of upper two levels, reflecting the proportions and design intent of the upper level wards within the existing Anne Leach Wing.

The use of darker tones at ground level allows the carpark screen above to 'float', while visually appearing as a negative space and highlighting the screen. Installing the bricks in a stack bond pattern reflects the proportions and set out of the cladding façade panels on the upper levels. Windows have square profile horizontal and vertical sun shading, utilising the same profile as in the new theatre expansion building.

The upper level façade is articulated at key points by framed tinted glass panels, acting as a negative space between the more prominent elements each side. This highlights the entry to the carpark and breaks up the façade to the east and west where the roof decks occur. The tinted glass facades are in keeping with the 2009 Marjorie Brislee Wing ward entry and the 2009 Medical Centre material palettes.

Please refer to Appendix 3 - Architectural Context, for visual examples of building within the Hollywood Private Hospital site.

Vehicular and Pedestrian Access

Hollywood Hospital can be accessed either by Monash Avenue to the south or Verdun Street to the north. There are five crossovers into different sections of the hospital from Monash Avenue and two from Verdun Street. The proposed development is located towards the north of the subject site and therefore will be primarily accessed from Verdun Street. It is expected that vehicles will enter from the most east entry along Verdun Street, as this offers the most direct route to the proposed Consulting Centre. Pedestrian access to the site will likely be obtained from Monash Avenue due to the bus route travelling down Monash. Currently, there is no bus route along Verdun Street. Pedestrian paths are to be provided throughout the site to ensure safe pedestrian movement.

Car Parking

This application proposes the creation of 317 car bays (including 6 ACROD) to service the new building and wider Hospital. 28 standard bays and 6 ACROD bays are provided on Level -3, 110 standard bays on Level -1 and 116 standard bays on Level 0. This equates to a total of 260 internal car bays. An additional 57 car bays are to be constructed externally. It is noted that 42 existing bays will be removed to allow for the proposed development. This therefore equates to a net car parking increase of 275 bays on the Hollywood Hospital site.

It is understood that the Hollywood Private Hospital Site has a maximum car parking cap of 1800 parking spaces (as outlined in TPS2). With the exclusion of on-street bays along Monash Avenue and Verdun Street, catering/loading areas, informal parking areas, and the PM parking for afternoon/ evening shift workers the supply which contributes to the parking cap for the entire Hospital site is 1,434 bays. The proposed development contributes 275 bays towards this total which results in a total parking provision of 1,709 which is within the parking cap set by the WAPC.

Landscape Philosophy

A landscape concept plan has been prepared by PlanE in support of the proposal. The design intent for the development, as described by PlanE, is to provide an inviting design that will allow for sufficient circulation of the site, while being aesthetically pleasing for users and general public. With the use of lush garden bed planting with shade tolerant species and hedge planting help to create a diverse range of visual experiences throughout the site.

PlanE's key objectives for the Landscape Design include:

- To create sustainable, visually pleasing landscapes which are relevant and welcoming to the whole Hollywood Private Hospital site;
- To create a landscape setting that is complementary to the building architecture, highly legible to users and provides for all levels of mobility across the external spaces;
- To introduce and establish plant species that are known to tolerate the local conditions, are adaptable to the local soil types and climatic characteristics, and provide seasonable colour, smell and texture to enhance the outdoor areas;
- To use low water use plants, with a preference for hardy native and exotic species to ensure that the proposed landscape reaches its' full potential;
- To use materials that complement the colours, textures and forms of the architectural style adopted for the hospital buildings and are robust in terms of ongoing maintenance and longevity; and
- Refer to Crime Prevention Through Environmental Design principles for the external spaces to ensure safety of staff and visitors is fully considered. Key aspects of the landscape strategy include no obstructions to lines of sight, low level planting with upper canopy trees, use of robust materials and detailing, and well-lit spaces.

The use of large Magnolia species will help to soften the buildings and Pyrus nivalis (Snow Pears) avenue to the entry will create an enhanced visual experience for the visitors. Hedge planting to the carpark boundary will also create a soft buffer and screen to the carpark areas. Shade tolerant species to the southern end of the hospital building is to ensure appropriate planting that will mean the plants flourish in the space. Existing trees (unless specified) to be removed considered for transplant or sold off for other projects.

A simple hard works materials palette is used to contrast nicely with the planting and also complement the building aspects of the hospital. A single material to the paths helps to create familiarity and enhance the connectivity of the site.

Refer to Appendix 4 - Landscape Plan

Operational Overview

Each consulting suite will be independently operated similar to a typical medical centre. Most consulting staff will work regular General Practitioner business hours however some suites will only be used on non-surgical days for example when the doctors are consulting as opposed to undertaking procedures or consulting elsewhere.

While each consulting suite is yet to be assigned, a single practitioner suite of say 90sqm would typically include one doctor and one receptionist/administration staff, and depending on the type of doctor may also include a nurse or medical assistant. The larger consulting suites would typically include more doctors (typically two but can be up to four) and administration staff/nurses or a practice manager. More detailed operational details can be provided if necessary, recognising that the consulting suites and future hospital services tenancy spaces are yet to be leased.

Waste Management

The bin store is located on Level -3 (at grade). Refuse collection will occur at the dedicated collection area located near the proposed entrance to the consulting centre. During collection days, the bins will be moved to the collection area for collection by private contractor and returned once they have been emptied.

Waste management for the development is summarised as follows:

1. Bulk bins (240lt and 660lt sulo bins) kept in bin store;
2. Bins rolled to verge immediately outside the building on collection day;
3. Collection by contracted waste management company occurs 6 days a week Monday – Saturday;
4. Bins rolled back into bin store;
5. Clinical Waste is collected three times a week, Monday, Wednesday, Friday; and
6. Tenancies will be cleaned by cleaning contractors after hours and waste discarded into the bin store bins during the night.

We anticipate a condition of development approval will require the preparation of a Waste Management Plan (if required).

Signage

Simple building signage comprising 'Hollywood Consulting Centre' is proposed to be located on the northern external frontage of the Centre as shown in Appendix 2. The sign is written in rushed silver capital letters, intended to clearly communicate the location and contents of the proposed building to visitors and complement the architectural design and materiality. The proposed sign is approximately 2.2 metres in length by 5.5 metres in width.

See North Elevation contained within Appendix 2 – Development Plans

Planning Assessment

The following section provides an assessment of the application against the relevant planning framework.

Land Use Permissibility

The proposed development is consistent with the 'Urban' zone under the MRS.

Under TPS2, a 'Hospital' is defined as *"any building, whether permanent or otherwise, in which persons are received and lodged for medical treatment or care and (without limiting the generality of the foregoing) includes "C" class hospitals and convalescent homes"*.

Further, the approved Masterplan advocates a variety of hospital and medical related facilities and services across the site.

The proposed development represents an integrated extension of the existing Hospital. A Hospital and its ancillary facilities are permitted uses under the Special Use zone and can therefore be approved.

It is further noted that the existing Hollywood Medical Centre is located within the south-eastern corner of the site fronting Monash Avenue, to which the proposal is not dissimilar.



New Theatre Expansion (currently under construction)

Assessment against the Hollywood Private Hospital Masterplan 2013

The following table provides a detailed assessment of the proposed development against the development standards of the approved Masterplan (clause 6.2), with any deviations discussed thereafter.

Master Plan Provision	Proposed Development	Comment
<p>Parking</p> <p>Maximum 1,800 car bays on Hollywood Private Hospital site.</p>	<p>Existing bays: 1,434</p> <p>Net change proposed: +275</p> <p>Total: 1,709 (refer to Appendix 5 – TIA)</p>	Complies.
<p>Setbacks</p> <ul style="list-style-type: none"> • Front/Monash Ave: 10.0m • West: 10.0m • Verdun St: 10.0m • East boundary: nil setback 	<p>Setback approximately:</p> <ul style="list-style-type: none"> • Front/Monash Ave: >180m • West: >180m • Verdun Street: >80m • East boundary: >60m 	Complies.
<p>Plot Ratio</p> <p>Maximum 1.0 for the site</p>	<p>The proposed development does not represent the full redevelopment of the site as envisaged by the Masterplan. It is considered that as portions of the site remain undeveloped, the plot ratio of the site is below the maximum of 1.0.</p>	Complies.
<p>Building Height</p> <p>In accordance with clause 6.5.6 and Figure 6 of the Masterplan:-</p> <p>Zone 2: max. 6 storeys or approximately RL35 – 40.4</p>	<p>5 storeys or RL31.33 (plant/roof)</p> <p>RL36.626 (lift overrun)</p>	Complies.
<p>Open Space</p> <p>In accordance with Appendix 2 of the Masterplan with a minimum of 25% of the site</p>	<p>Given clause 6.2 of the Masterplan states the Masterplan shows 25% open space, and that the proposed development does not represent the full redevelopment of the site, it is considered that there is sufficient open space existing on the subject site to retain and meet the 25% requirement.</p>	Complies.
<p>Future ‘development areas’</p> <p>The Masterplan outlines future development areas which cover portions of the campus where existing buildings may be renovated or replaced in the future.</p>	<p>The proposed development generally aligns with major development areas as outlined in the Masterplan. This includes future development areas with uses unknown and one site allocated for multi-storey car parking, as proposed by this application.</p>	<p>Considered to comply. The proposed development although varied from the indicative building footprint (as outlined in the Masterplan), is consistent with the type and general location of future development.</p>
<p>Internal pedestrian movements (main covered walkways)</p> <p>The Masterplan outlines indicative pedestrian movements throughout the subject site.</p>	<p>The pedestrian movement as outlined in the Masterplan shows an internal walkway dissecting the proposed development site.</p>	<p>Considered to comply. The proposed development is consistent with the movement principles the Masterplan advocates for, which includes integrating new development with existing and facilitating ease of movement across the Hospital campus.</p>

Legal status of the Masterplan

Schedule 5 of TPS2 states that a Masterplan is to be approved pursuant to Clause 8.3 of the Scheme. Clause 8.3 is entitled "procedure for making or amending a local planning policy" and in this regard the Masterplan would then be categorised itself a local planning policy and is subject to the relevant provisions. The categorisation of the Masterplan as a Local Planning Policy is supported by Clause(2)(b) of Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* 'Deemed Provisions', stating that a policy may apply to a local government area or area within it, consistent with that of a Masterplan.

As the Masterplan is defined as a policy, its content is not binding as per Clause 8.8.2 of the Scheme which states:

A Local Planning Policy is not part of the Scheme and does not bind the Council in respect of any application for planning approval but the council is to have regard to provisions of the Policy and the objectives which the Policy is designed to achieve before making its decision.

This is reinforced by Clause 3(5) and 67 of the Deemed Provisions; stating that the local government must have due regard for relevant local planning policy, however it's content is not binding.

The proposal, inclusive of its required building footprint and connectivity within the site, offers state-of-the-art consulting suites, oncology facilities and space for future hospital services. It is asked that the City consider the development based on the premise that it has been designed to complement, integrate with, and improve the current Hospital environment, built form and service offerings across the Campus and wider health precinct.

Traffic Generation

The Transport Impact Assessment (TIA) prepared by Cardno, outlines the transport aspects of the proposed development focusing on traffic operations, loading vehicle operations, access and car parking. Provided also are walking, cycling, and public transport considerations. The TIA concludes:

- There is currently good footpath connectivity to a number of local bus stops from the subject site. The bus stopes cater for a number of local bus services including routes to Fremantle, Claremont, Subiaco, Morley and the CBD;
- Cycling infrastructure within the surrounding area of the subject site is average with disjointed paths and a lack of high quality connections. However, the design of the Winthrop Avenue Bike Facility is currently underway, which will greatly benefit cycling connection to the subject site once completed;
- The proposed development will have a trip generation of approximately 334 vehicles in the AM peak and 381 vehicles in the PM peak hour;
- Site access to the consulting centre will use the existing accesses into the Hollywood Private Hospital Precinct. Current access arrangements will remain generally unchanged in all future scenarios, with the bulk of the vehicle traffic generated by the Hospital entering and existing via Monash Avenue;
- A desktop assessment was conducted for the key intersections and accesses located near the subject site. Almost all intersections operate within acceptable capacity limits during both peak hour periods. Overall the traffic impacts of the proposed development is unlikely to have a significant effect on the function of the surrounding road network; and
- The proposed parking provision for the consulting centre is within the parking cap imposed by the WAPC for the Hollywood Private Hospital.

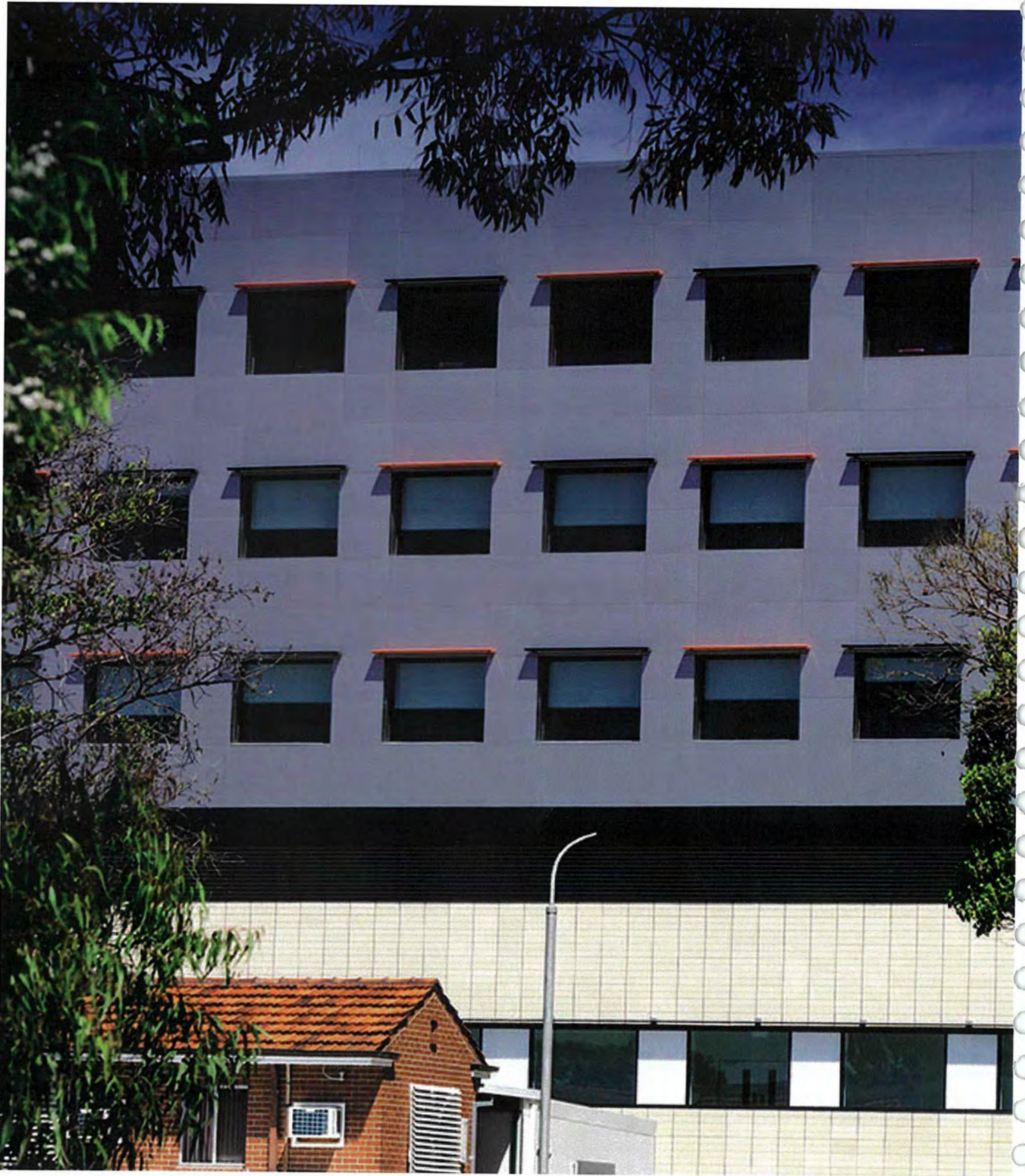
Refer to Appendix 5 - Transport Impact Assessment

Planning Merit and Orderly and Proper Planning

The principles of orderly and proper planning require that new development is a logical and efficient extension of existing development, and consistent with the planning vision and strategic direction for the locality. The key points regarding the proposal are:

- The proposed development is consistent with the City of Nedlands town planning intent and desired land use for the site and represents the improvement of hospital and medical related facilities as advocated by the Masterplan, contributing to the broader Hollywood Private Hospital and medical precinct;
- The development remains consistent with the provisions contained within the City's draft Local Planning Scheme No. 3;
- The proposal does not prejudice the planning for the wider 190-hectare UWA-QEII Specialised Activity Centre, with Ramsay Health Care being a key stakeholder in its preparation;
- The development will have little or no adverse impact on the amenity afforded to the surrounding development given the land use type and given there will be no overshadowing of adjoining developments, no impact on privacy and cause no loss of views
- The proposed development employs high quality architectural and landscape design and represents a significant improvement on the current site in terms of built form;
- The area is serviced by an existing road network, public transport services and will result in acceptable levels of additional traffic generation in the area; and
- The proposed parking provision for the consulting centre is within the parking cap imposed by the WAPC for the Hollywood Private Hospital.

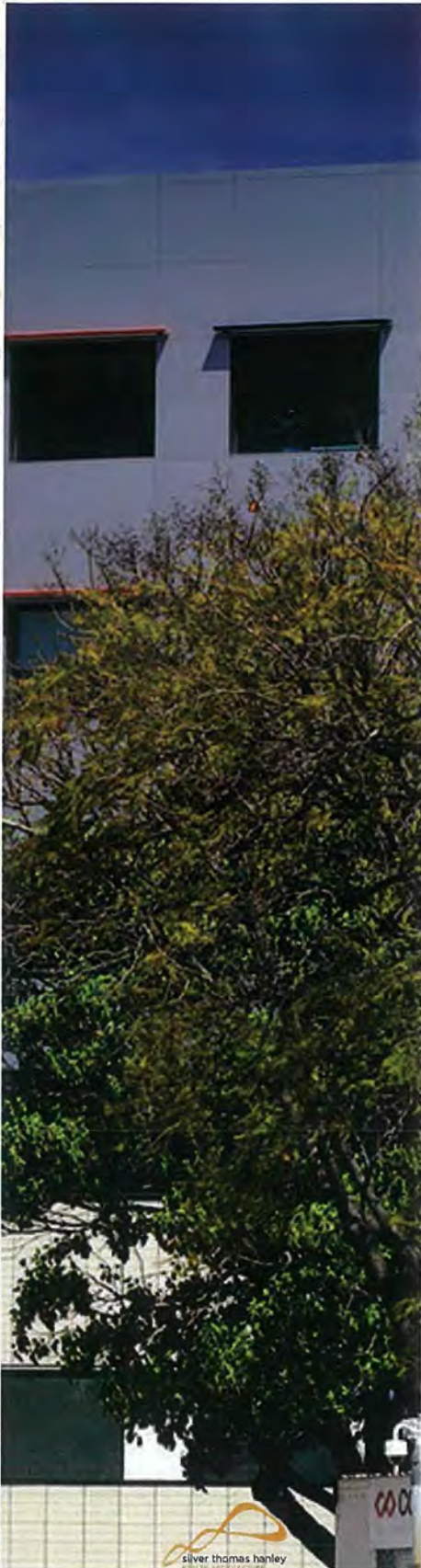
On the basis of the above and the detailed planning assessment provided in this report, it is considered that the proposed Hollywood Consulting Centre accords with the principles of orderly and proper planning. The proposal is therefore considered to have planning merit and is worthy of support.



Conclusion

Ramsay Health Care is committed to the ongoing improvement of its health services provided to patients at its Hollywood Private Hospital, Nedlands. The proposed five-storey consulting centre, comprising 33 consulting suites, future hospital services and new car parking, has been designed with a contemporary material palette, reflective of the scale and use of the building. It captures common elements of other buildings within the site particularly the recently completed new ward block (Anne Leach Wing), while maintaining its own distinct identity.

This report has demonstrated the proposed Hollywood Consulting Centre is consistent with the strategic and statutory planning framework for the locality, the intended purpose of the wider UWA_QEII Specialised Activity Centre, and the principles of orderly and proper planning. On the basis of the information provided within this application, we respectfully request the support of the City of Nedlands and approval of the Metropolitan West Joint Development Assessment Panel.



Appendix 1

Certificate of Title

WESTERN



AUSTRALIA

REGISTER NUMBER	
564/DP63425	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
3	19/1/2016

RECORD OF CERTIFICATE OF TITLE
 UNDER THE TRANSFER OF LAND ACT 1893

VOLUME 2735 FOLIO 137

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 564 ON DEPOSITED PLAN 63425

REGISTERED PROPRIETOR:
 (FIRST SCHEDULE)

RAMSAY HOSPITAL HOLDINGS PTY LTD OF LEVEL 9, 154 PACIFIC HIGHWAY, ST LEONARDS, NEW SOUTH WALES

(AF L192470) REGISTERED 6/1/2010

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
 (SECOND SCHEDULE)

- H505459 EASEMENT TO WATER CORPORATION. SEE SKETCH ON DEPOSITED PLAN 63425. REGISTERED 18/7/2000.
- EASEMENT BURDEN CREATED UNDER SECTION 136C T.L.A. FOR RIGHT OF CARRIAGEWAY PURPOSES - SEE DEPOSITED PLAN 63425
- EASEMENT BENEFIT CREATED UNDER SECTION 136C T.L.A. FOR GAS SUPPLY PURPOSES - SEE DEPOSITED PLAN 63425
- EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT FOR SEWERAGE PURPOSES TO WATER CORPORATION SEE DEPOSITED PLAN 63425
- EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT FOR ELECTRICITY PURPOSES TO ELECTRICITY NETWORKS CORPORATION SEE DEPOSITED PLAN 63425
- *L338348 NOTIFICATION CONTAINS FACTORS AFFECTING THE WITHIN LAND. LODGED 8/6/2010.
- L364006 EASEMENT BENEFIT FOR ACCESSWAY PURPOSES - SEE SKETCH ON DEPOSITED PLAN 66453 REGISTERED 3/8/2010.
- L364005 EASEMENT BURDEN FOR ACCESSWAY PURPOSES - SEE SKETCH ON DEPOSITED PLAN 66453 REGISTERED 3/8/2010.
- N125846 LEASE TO SKG RADIOLOGY PTY LTD OF LEVEL 2/30 ORD STREET WEST PERTH EXPIRES: SEE LEASE. AS TO PORTION ONLY REGISTERED 18/9/2015.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
 * Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
 Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

END OF PAGE 1 - CONTINUED OVER

RECORD OF CERTIFICATE OF TITLE

REGISTER NUMBER: 564/DP63425

VOLUME/FOLIO: 2735-137

PAGE 2

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	DP63425
PREVIOUS TITLE:	2140-96
PROPERTY STREET ADDRESS:	101 MONASH AV, NEDLANDS.
LOCAL GOVERNMENT AUTHORITY:	CITY OF NEDLANDS

Appendix 3

Architectural Context



HOLLYWOOD PRIVATE HOSPITAL Architectural Context



New Theatre Expansion (currently under construction)
Colourbond steel cladding, aluminium cladding and Equitone cladding



New Theatre & Ward Block (Anne Leach Wing) Completed 2015
Aluminium cladding and terracotta facade tiles



New Theatre & Ward Block (Anne Leach Wing) Completed 2015
Aluminium cladding and terracotta facade tiles



Old kitchen building stock Completed circa 1940s – being demolished



Marjorie Brislee Wing - Ward Block Completed 2009
Face brick, aluminium cladding, painted render, tinted glass



New Multi-Deck Parking Completed 2009
Painted concrete, CFC cladding and glass façade.



Medical Centre Completed 2009
Face brick, aluminium cladding, tinted glass



Ward & Entry Building Completed 1997
Face brick, render, tinted glass



Ward Block Completed Circa 2005
Face brick, render



Old Building stock Circa 1940s – to be demolished near term
Face brick



Old building stock Circa 1940s – to be demolished near term (2017-2018)
Face brick



Old Building stock Circa 1940s – to be demolished medium term
Face brick, render



Old building stock Circa 1960s – to be demolished long term
Concrete, facebrick, render



Old Administration building stock Circa 1980s – to be demolished long term
Concrete, facebrick, render

CITY OF NEDLANDS
Item 13.6 - Attachment

5 MAR 2014

RECEIVED

Hollywood Private Hospital Masterplan



Prepared for
Ramsay Health Care

By Landvision



February 2014

City Of Nedlands

11 MAR 2014

Received
Records Services

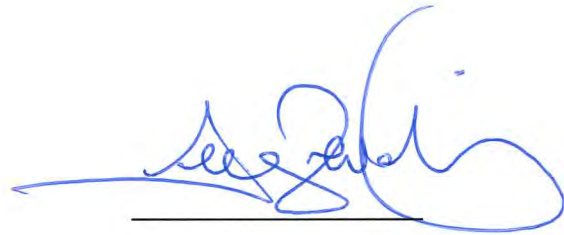
FILE COPY

Endorsement

The Hollywood Private Hospital Masterplan, February 2014 has been endorsed by:



Manager
Project Development and Property Services
Hollywood Private Hospital



Chief Executive Officer,
City of Nedlands

11th March 2014

Date

11th March 2014

Date

Hollywood Private Hospital Masterplan has been prepared by:

Mr. Peter Driscoll – Principal Planner
Landvision Pty Ltd
Ph: (08) 9388 8181
Fax: (08) 9388 8185
Address: Suite 5/16 Nicholson Road, Subiaco WA 6008

In association with

Silver, Thomas, Hanley (Aus) Pty Ltd
Health Architecture
Ph: (08) 6363 9444
Fax: N/A
Web: www.silverthomashanley.com
Address: Suite 89, City West Centre – 102 Railway Parade
West Perth WA 6005

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Hollywood Private Hospital Masterplan 2014

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- Appendix 2: Report on Landscaping at HPH, Pullyblank Pty Ltd
- Appendix 3: Hollywood Private Hospital Lighting Management Strategy, January 2014

Hollywood Private Hospital Masterplan 2014

EXECUTIVE SUMMARY

In order to meet the health and wellbeing needs of the expanding population who use the Hospital's services, the Masterplan has been created with future expansion and development of services to aim to ensure Hollywood Private Hospital can continue to provide first – class health services to the community.

The Masterplan concentrates on several key factors including future development, access and parking, building height and appearance, neighbourhood amenity, landscaping outdoor spaces, parking and connectivity to public transport.

The Masterplan provides excellent access between the community and the hospital, between the buildings on the hospital grounds and within the buildings themselves. Access in and around the hospital is enhanced by good signage, pedestrian walkways between buildings and the provision of secure and weather-proof links.

Planning for the hospital has considered proposals for future improvements to the availability of public transport, primarily buses but also a potential light rail system. This will ensure that patients and visitors will have increased access to public transport while the existing approximately 1500 car parking bays (which can be expanded to be up to 1800 bays) will ensure both staff and the public have adequate onsite parking facilities together with improved "end of trip" facilities.

The Masterplan shows areas of proposed works which will be likely to be developed within the next 5 years and include:

- expansion of the Hollywood Clinic;
- expansion of the theatre, together with new kitchen and additional wards;
- a research facility;
- a multistorey carpark; and
- an additional floor of parking on the existing multistorey carpark.

In addition the Masterplan shows a number of Future Development Areas where buildings and facilities are likely to be renovated or replaced in the future over a period of more than 15 years. It is not proposed to specify what each Future Development Area will be developed for other than for hospital and allied services. Health operators must respond to the changing needs of the community and are not in a position to "lock in" the exact nature of the future use of Future Development areas but it must be consistent with the provisions and standards of the Masterplan.

The Hospital Masterplan delivers or provides guidance on:

- A planning and design framework regarding the principles and parameters for the future long-term use and development of the Hospital campus;
- The desired future character of the Hospital campus;
- Integration with surrounding land uses, infrastructure and street patterns;

Hollywood Private Hospital Masterplan 2014

- Entry and exit points to the site and analysis of the impacts on the existing road network;
- Management of stormwater and other infrastructure on the site;
- Guidance for developing a sustainable built form and open space setting;
- Background input into the development of statutory plan amendments for the assessment of detailed development applications regarding the site through the adoption of the Masterplan; and
- Ongoing management of infrastructure and public areas on the site.

HPH seeks the adoption of the Masterplan to guide future growth and development of the site and will continue to monitor the Masterplan and its implementation. From time to time HPH may seek to modify the Masterplan.

The Masterplan comprises:

- Hollywood Private Hospital Master Plan –February 2014

which includes:

- Appendix 1: Strategic Planning Context
- Appendix 2: Report on Landscaping at HPH, Pullyblank Pty Ltd
- Appendix 3: Lighting Management Strategy, January 2014,
Electronic Technology Consultants

Hollywood Private Hospital Masterplan 2014

1.0 INTRODUCTION

Over the past years development has occurred at Hollywood Private Hospital (HPH) on an 'as needed' basis and in November 2009 the Council of the City of Nedlands determined that it is no longer willing to approve further development until an overall Masterplan has been approved. Prior to this the Council approved a Masterplan for the Hospital campus in 2005 which now requires updating and modification to meet the future development program for HPH.

A modified Masterplan submitted to Council with a proposed Scheme Amendment (the Amendment did not proceed) prepared by Ramsay Health Care was considered by Council in December 2009. The Council resolved that before any future development is approved a revised or new Masterplan was required with several matters needing to be satisfactorily addressed including the following:

- the Masterplan should in its presentation and detail eg. refer to height from an agreed datum or mean average base level in area;
- be accompanied by a base plan which shows only the existing building footprints, parking etc. without added data;
- produce a modified version of the proposed Masterplan together with an east – west, north – south profile to show and measure building heights in each of the Precincts to make it easy to get to show or determine the maximum height over the whole Precinct in future;
- show proposed development setbacks;
- a plan showing all existing areas of landscaping, its percentage of the site; and
- produce a simple Masterplan with no buildings shown dividing the site into simplified sub-precincts if there are common areas.

The above Masterplan will then establish the existing development standards for the whole site. This report presents a proposed Masterplan which illustrates the potential future development of the whole HPH site for consideration.

The Masterplan shows areas of proposed works which will be likely to be developed within the next 5 years and which include:

- expansion of the Hollywood Clinic;
- expansion of the theatre, together with new kitchen and additional wards;
- a research facility;
- a multistorey carpark; and
- an additional floor of parking on the existing multistorey carpark.

HPH seeks the adoption of the Masterplan to also guide future growth and development of the site beyond 15 years time and will continue to monitor the Masterplan and its implementation. From time to time HPH may seek to modify the Masterplan.

Hollywood Private Hospital Masterplan 2014

1.1 Background

HPH was constructed during World War II by the Commonwealth Government as a 500 bed hospital to care for service men and women and was first occupied in 1941. In 1947, control of the hospital was passed to the Repatriation Commission to provide acute care for veterans and war widows and it became the Repatriation General Hospital Hollywood.

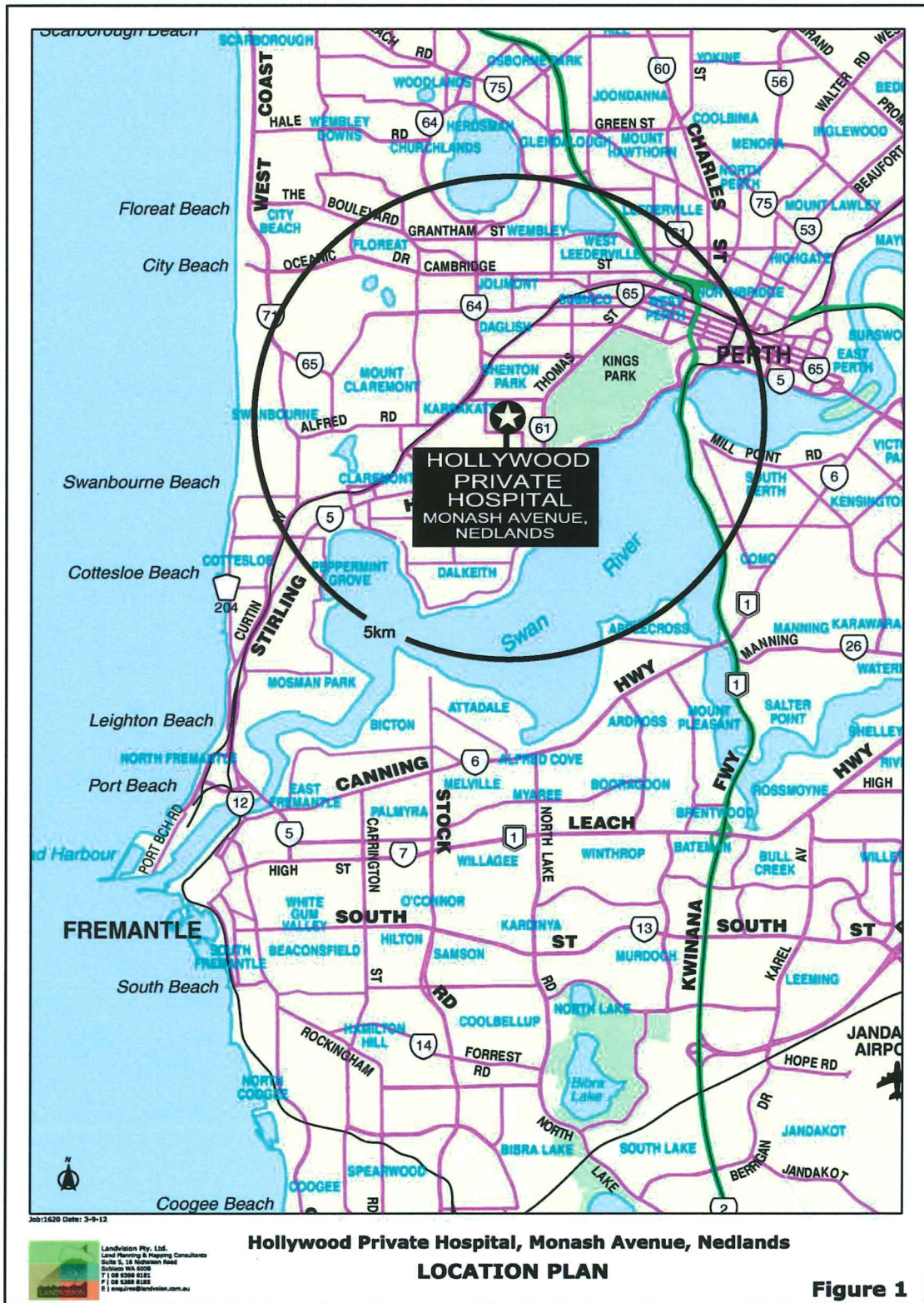
Ramsay Health Care, an Australian owned company, became the owner – operator in 1994 and remains the current owner. From its modest beginnings the Hospital has emerged as an acknowledged Centre of Excellence in several medical specialities including orthopaedics, urology, cardiology, psychiatry and oncology. The hospital currently has a licence to treat 492 overnight patients and 167 day patients or a total of 659 patients in any one day providing care for private patients and entitled war veterans and war widows. The licence to treat a specified number of patients is issued annually by the Department of Health.

Over the past 5 years HPH has carried out a major redevelopment of its hospital facilities, access and parking which is reflected in Figure 6 – Masterplan.

The improvements include:

- upgrading theatre staff accommodation and the sterile supply department;
- construction of a new gastroenterology unit;
- construction of new operating theatres;
- construction of a new ward block;
- construction of a multi- storey car park;
- construction of an additional Day Surgery, Day Procedure Unit and Accommodation;
- construction of Hollywood Medical Centre (dedicated Specialist suites); and
- extensive landscaping of the Verdun Street verge in cooperation with the City of Nedlands.

Hollywood Private Hospital Masterplan 2014



2.0 MASTERPLAN, VISION, GOALS AND OBJECTIVES

2.1 What is a Masterplan?

A Masterplan is a high level plan designed to provide a coordinated approach to future development. Masterplans contain a series of illustrations and explanatory text to specify the planning principles and controls within a particular area as a whole. Their intent is to guide landowners, government and the community on how and where development should occur.

The Masterplanning process will determine how HPH can best be used in the future, considering heritage, setting, existing uses, future uses and sustainability. The HPH Masterplan is a long term vision for the site and will take many years to implement.

2.2 Vision

The vision for the HPH campus is to:

- Develop a distinctive and attractive campus that capitalises on its existing natural, building and heritage assets to uniquely position itself within the region;
- Take advantage of an ongoing improvement of the public transport system that is able to support the intensification of employment and patients numbers;
- Provide a Masterplan which requires that future facilities are flexible enough to adapt to continuous changes in the health care delivery system and to support rapid technological advances and to increase the efficiency of the hospital operations, help manage costs and improve service to patients.

2.3 Goals

The goals for the Masterplan include:

1. Prepare a Masterplan to guide growth and development through to the year 2030 and beyond:
 - Provide opportunities for public review and comment;
 - Prioritise future improvements and new development; and
 - Provide certainty to neighbouring property owners and the City of Nedlands.
2. Create an aesthetically pleasing and highly functional hospital campus environment.
 - Continue to enhance the main entry from Monash Avenue;
 - Create an integrated, internal circulation system for all vehicles (includes emergency vehicles) and pedestrians;

Hollywood Private Hospital Masterplan 2014

- Provide sufficient onsite parking for all users while creating initiatives to reduce the general reliance on private cars for access, increasing the use of public transport as the services are improved;
 - Provide high quality, sustainable landscaped buffers and walkways;
 - Support public transport services; and
 - Minimise exhaust, light and noise relating from hospital operations.
3. Remain a good neighbour
- Control and manage vehicle access to the campus to reduce traffic in adjacent residential neighbourhoods;
 - Provide landscaped buffers and visual screening where they would reduce the visual impact on neighbouring property owners;
 - Consolidate the footprint of hospital buildings to maximise the amount of open space;
 - Setback higher buildings to the centre of the campus and away from residential buildings;
 - Build lower buildings at the perimeter that complement the architecture of and provide for transition to the adjacent neighbourhood (Note: this is more important along Verdun Street where the majority of adjacent homes are located); and
 - Enhance portions of the campus edge with desirable and usable places benefitting patient care, caregivers and the surrounding neighbourhood.

2.4 Objectives

1. Prepare a Masterplan to inform Council and the public and other stakeholders of the future development of Hollywood Private Hospital;
2. To prepare a Masterplan consistent with the requirements of the Town Planning Scheme No. 2 and develop a set of conditions to be listed in the Masterplan which once approved by Council provides the development requirements of future development; and
3. Reflect the findings of the Traffic Impact Statement, the Drainage Management Plan, and the Masterplan and make any relevant recommendations in this respect.

The HPH Masterplan provides a framework for guiding the development of the hospital campus. In preparing this Masterplan the following was taken into consideration:

- Relevant State Planning policies;
- The City of Nedlands Local Planning Strategy and Scheme and Policies;
- The Traffic Impact Statement (See Part 2: Background Reports);
- The Drainage Management Plan (See Part 2: Background Reports);
- Health and medical research and education;
- The adjacent QEII Medical Centre Masterplan 2010 by Hassell;
- The general and urban environment;
- Traffic and access;
- The neighbouring urban form;
- Site functions such as stormwater and utility infrastructure; and
- Statutory Planning Context.

Hollywood Private Hospital Masterplan 2014

3.0 PLANNING CONTEXT

The subject land is private freehold land and zoned 'Special Use' in Town Planning Scheme No. 2 (TPS No. 2), City of Nedlands. 'Special Use' zones are listed in Schedule V – 'Special Use' Zone (see Figure 2) as follows:

Schedule V – Special Use Zone
AMD 97 GG 22/11/86

(A) DESCRIPTION OF SITE	(B) PERMITTED USES AND PROVISIONS APPLYING TO SPECIAL USE SITES
Pt. Loc 1715 and Pt. Loc 8697 Monash Avenue, Nedlands (Hollywood Repatriation Hospital) AMD 97 GG 22/11/96	i. Hospital and ancillary facilities; and ii. (ii) Aged persons housing and frail aged persons hotel, subject to being advertised in accordance with the provisions of Clause 6.3.3 and 6.3.4.

Clause 3.10 Special Use Zone states that:

“No person shall use the land or any building or structure thereon in a Special Use zone, except for the purposes set against that land in Schedule 5 and subject to compliance with any conditions specified in the Schedule with respect to the land”.

As the building footprints, shown within the Future Development Areas on Figure 6, are indicative only it is proposed that the only variation which would be accepted by Council without a formal amendment would be for a variation to the indicative building footprint when:

- a) the modified building footprint remains within the Future Development Area; and
- b) the area of the modified building footprint is equal to or less than the area shown on Figure 6.

All development is to align with the Masterplan except as otherwise provided for in the Masterplan.

Any proposed development and development standards which are inconsistent with TPS No. 2 or the approved Masterplan would require an amendment and modifications to Schedule V, column (B) or to the Masterplan. When there is a discrepancy between TPS No. 2 and the Masterplan, the Masterplan shall prevail.

As the Hospital is not on a Regional Reserve the development does not require approval of the Western Australian Planning Commission (WAPC). It is noted however, that at its meeting held on 19 June 2007 the Statutory Procedures Committee of the WAPC adopted in principle the Queen

Hollywood Private Hospital Masterplan 2014

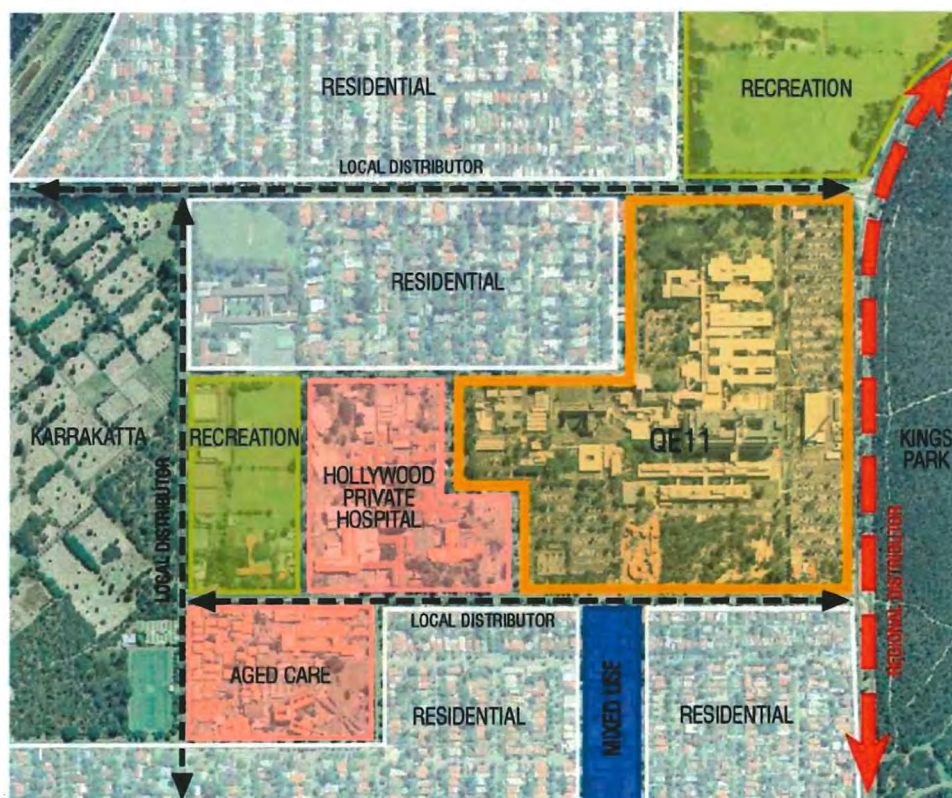
Elizabeth II Medical Centre Access and Structure Plan (9 February 2007) as a guide to the future planning and development of the Queen Elizabeth Medical Centre Precinct which includes HPH.

The WAPC stated in its decision that 'it considers without the required bus services the planned expansion of the QE II Medical Centre site would not be acceptable on planning, transport and sustainability grounds'.

Although the expansion of QE II is proceeding and this issue has been resolved the public transport available to staff and visitors to HPH still does not cater to the specific demands of both groups, in particular staff, which results in the ongoing demand for onsite parking.

Of particular relevance to the forward planning of HPH the following condition was adopted as part of the WAPC resolution:

- '8. Advise the City of Nedlands and Hollywood Private Hospital that the Commission is aware of the maximum limit of 1,800 car parking spaces in the approved site structure plan. The Commission would wish to be consulted on any proposal which would lead to a total number of car parking spaces exceeding 1,800 bays. The Commission further would be minded to introduce a Clause 32 resolution requiring any development exceeding 1,800 bays to be referred to the Commission for its determination'.



Source: QEII Medical Centre MasterPlan-Hassell 2010

HOLLYWOOD PRIVATE HOSPITAL LOCAL PLANNING CONTEXT

Hollywood Private Hospital Masterplan 2014

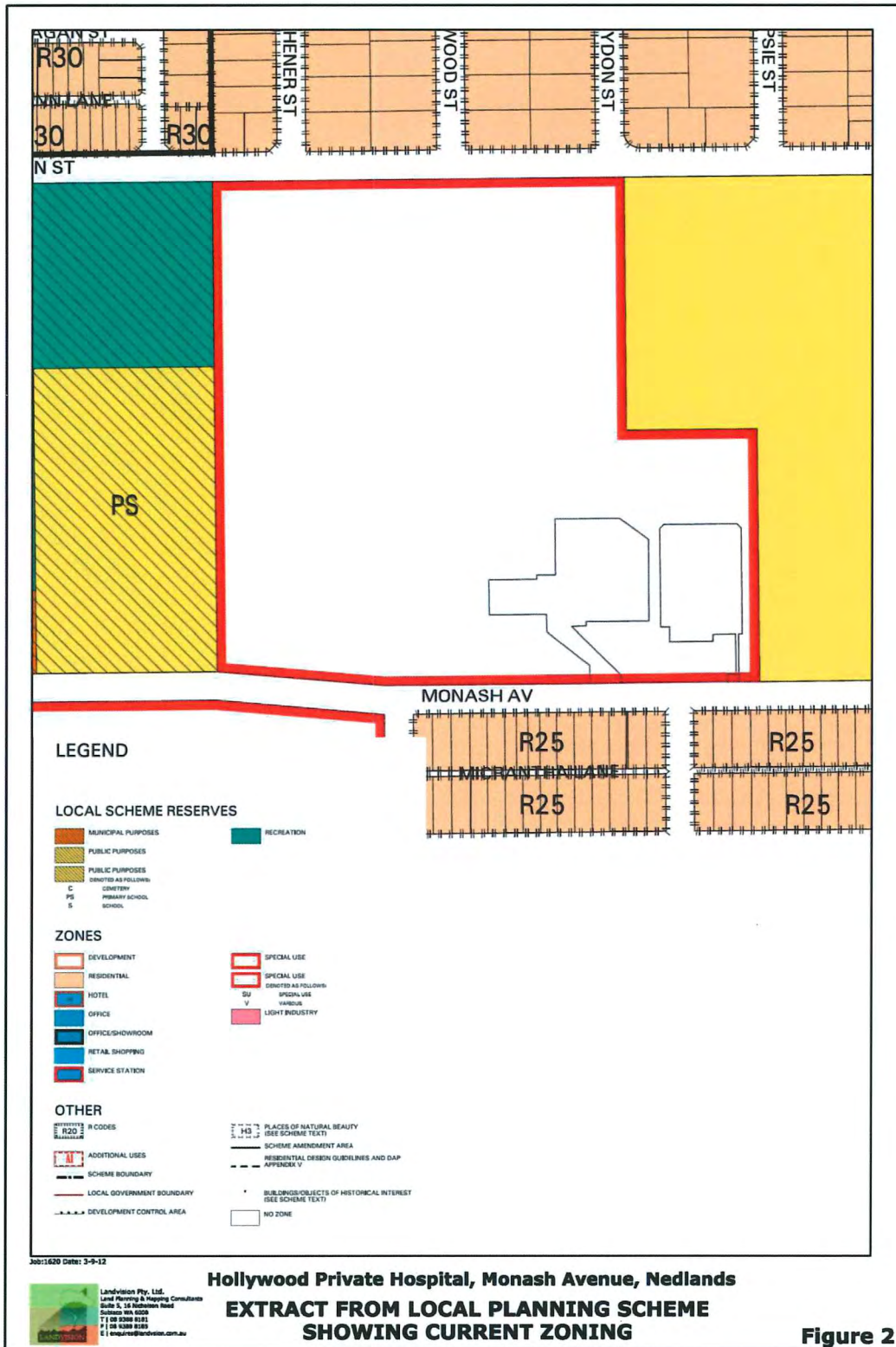


Figure 2

Hollywood Private Hospital Masterplan 2014

A meeting with the relevant officers of the Department of Planning for the WAPC confirmed that:

- i) the WAPC can call in the proposal if necessary; and
- ii) if the Masterplan proposed parking (together with existing parking) which in total does not exceed 1,800 car parking spaces the WAPC/DoP does not need to be consulted or involved in the formulation and assessment of the Masterplan.

Parking and access has emerged as significant issues to be addressed at Activity Centres. A discussion paper has been prepared by the DoP which seeks to use parking as a tool to help balance a variety of access demands for major activity centres.

The discussion paper "Activity Centres Parking" and the responses received when advertised is leading to a formalised policy that sets the new approach to parking supply and management and may formalise parking caps (maximums) for QEIIIMC including HPH.

Appropriate parking supply and management, combined with increased access via alternative modes and mass transit allows a centre to grow beyond the levels that the physical capacity of the local and regional road network would otherwise allow.

Whilst the focus of the discussion paper is on major centres identified in SPP 4.2, namely Perth Capital City, Primary, Strategic Metropolitan and Specialised (eg. QEIIIMC and HPH), the policy position described can also be applied to smaller centres and centres in regional areas.

The need for a SPP has arisen from policy gaps identified in preparation of parking and access strategies for a number of major centres including Stirling, Midland, UWA/QEII, Murdoch and Bentley/Curtin. The proposed SPP, together with Directions 2031 and SPP 4.2, would guide development of access and parking for major centres in the metropolitan area as part of a broad policy framework.

3.1 Property Description

The overall site comprises 3 titles with a total area of 11.7381 ha and which includes a number of easements.

Titles

A summary table of lot details is provided below and shown on Figure 3.

Lot	Diagram/Deposited Plan	Volume	Folio	Area (ha)	Owner Details
564	DP 63425	2735	137	10.6198	Ramsay Hospital Holdings Pty Ltd
563	DP 63425 Strata Plan 58316	-	-	0.6621	Hollywood Medical

Hollywood Private Hospital Masterplan 2014

					Centre
562	DP 66453 DIA 95434	2140	97	0.4600	Hollywood Specialist Centre

Easements and Rights of Carriageway

The following encumbrances being easements and rights of carriage are interests and notifications shown on the titles which impact the properties.

Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments
Easement	Sec 195 of the LAA	DOC H 505459	Lot 564	Water Corporation	
Right of Carriageway	Sec 136C of the ILA	This Plan	Lot 564	Lot 563	
Easement (Gas Supply)	Sec 136C of the ILA	This Plan	Lot 563	Lot 564	Limited in Height to 18m AHD
Easement (Sewerage)	Sec 167 of the P & D Act REG 33 (b)	This Plan	Lot 564	Water Corporation	
Easement (Electricity Supply)	Sec 167 of the P & D Act REG 33 (c)	This Plan	Lot 564	Electricity Networks Corporation	
Easement Gas Supply	Section 136 of the TLA	PD 63495	Common Property	Lot 564	
Easement (Waste Water Pipeline)	Section 195 of the LAA	DP 63495	Lot 562	Water Corporation	Right to Enter

4.0 EXISTING DEVELOPMENT AND SERVICES

Hollywood Private Hospital has been significantly renovated and refurbished over the past few years but still utilises a number of relatively old buildings lacking modern facilities and standards.

Ramsay Health Care plan to continue its ongoing upgrading program and has recently completed construction of new medical facilities ward block, multi - storey car park and a new medical centre on the HPH site.

HPH provides substantial services to the Perth Region and the wider State with a licence to treat patients, either as in-patients or in a wide range of day services.

There are more than 830 accredited specialists utilising or based at HPH in a wide range of disciplines together with a pharmacy, specialist centre, clinic, aged care and rehabilitation, palliative care and full surgery services.

In addition there are valuable specialists providing on site services which include:

- after hours GP service;
- Diagnostic Nuclear Imaging;
- Hollywood Fertility Centre
- Hollywood Functional Rehabilitation Clinic
- Perth Bone and Tissue Bank;
- Perth Cardiovascular Institute; SKG Radiology and
- Western Diagnostic Pathology

The HPH undertakes a number of community initiatives and has established an Environmental and Waste Management Committee and has a commitment to:

- eliminate unnecessary waste;
- provide responsive waste disposal eg. recycling, worm farm,;
- develop water efficiency management;
- the Greening Hollywood Program which has resulted in over 8,500 native trees, shrubs and grasses being planted onsite over the past decade;
- the installation of many bird boxes encouraging native bird activity;
- encourage staff to use alternative transport solutions (minimising single car drivers as the preferred travel method to get to work), the HPH has developed and introduced the Travel Smart program;
- aim to reduce all pollutants; and
- comply with all relevant standards and regulations.

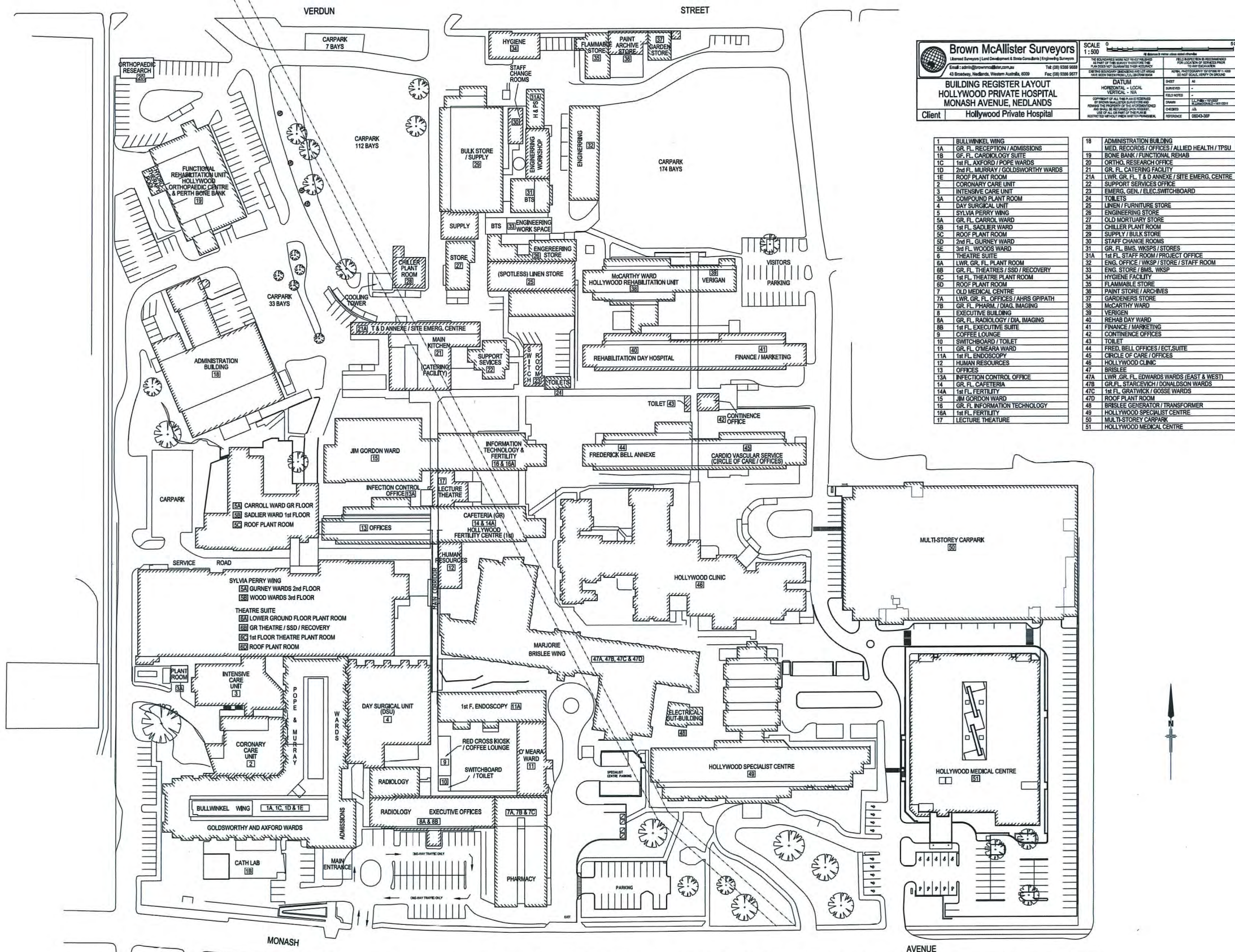
HPH actively encourages and supports clinical research as part of its role as a private teaching hospital.

Hollywood Private Hospital Masterplan 2014

HPH has important research facilities on site for Alzheimer's disease (The Sir James McCusker Alzheimer's Disease Research Unit).

Significant medical research is also undertaken in many other areas such as cardiology, orthopaedics, urology, mental health, oncology, palliative care and respiratory medicine. This is conducted often in collaboration with the major teaching hospitals and universities.

The focus on research provides an environment in which HPH clinicians can maintain their knowledge and expertise at the forefront of clinical practice.



Brown McAllister Surveyors
 Licensed Surveyors (Land Development & Street Connections) Engineering Surveyors
 Email: p.miller@brownmcallistersurveyors.com.au Tel: (08) 9388 9888
 43 Broadway, Nedlands, Western Australia, 6150 Fax: (08) 9388 9877

BUILDING REGISTER LAYOUT
HOLLYWOOD PRIVATE HOSPITAL
MONASH AVENUE, NEDLANDS

Client: Hollywood Private Hospital

SCALE: 1:500

DATE: 11/11/2011

PROJECT: BUILDING REGISTER LAYOUT

PREPARED BY: P. MILLER

CHECKED BY: J. BROWN

DATE: 11/11/2011

REVISIONS: 00043-30P

- | | | | |
|-----|------------------------------------|-----|--|
| 1 | BULLWINKEL WING | 18 | ADMINISTRATION BUILDING |
| 1A | GR. FL. RECEPTION / ADMISSIONS | 19 | BONE BANK / FUNCTIONAL REHAB |
| 1B | GR. FL. RADIOLOGY SUITE | 20 | ORTHO. RESEARCH OFFICE |
| 1C | 1st FL. AXFORD / POPE WARDS | 21 | GR. FL. CATERING FACILITY |
| 1D | 2nd FL. MURRAY / GOLDSWORTHY WARDS | 21A | LWR. GR. FL. 1 & D ANNEXE / SITE EMERG. CENTRE |
| 1E | ROOF PLANT ROOM | 22 | SUPPORT SERVICES OFFICE |
| 2 | CORONARY CARE UNIT | 23 | EMERG. GEN. / ELEC. SWITCHBOARD |
| 3 | INTENSIVE CARE UNIT | 24 | TOILETS |
| 3A | COMPOUND PLANT ROOM | 25 | LINEN / FURNITURE STORE |
| 4 | DAY SURGICAL UNIT | 26 | ENGINEERING STORE |
| 5 | SYLVIA PERRY WING | 27 | OLD MORTUARY STORE |
| 5A | GR. FL. CARROLL WARD | 28 | CHILLER PLANT ROOM |
| 5B | 1st FL. SADLER WARD | 29 | SUPPLY / BULK STORE |
| 5C | ROOF PLANT ROOM | 30 | STAFF CHANGE ROOMS |
| 5D | 2nd FL. GURNEY WARD | 31 | GR. FL. BMS. WKSPPS / STORES |
| 5E | 3rd FL. WOODS WARD | 31A | 1st FL. STAFF ROOM / PROJECT OFFICE |
| 6 | THEATRE SUITE | 32 | ENG. OFFICE / WKSPP / STORE / STAFF ROOM |
| 6A | LWR. GR. FL. PLANT ROOM | 33 | ENG. STORE / BMS. WKSPP |
| 6B | GR. FL. THEATRE / SSD / RECOVERY | 34 | HYGIENE FACILITY |
| 6C | 1st FL. THEATRE PLANT ROOM | 35 | FLAMMABLE STORE |
| 6D | ROOF PLANT ROOM | 36 | PAINT STORE / ARCHIVES |
| 7 | OLD MEDICAL CENTRE | 37 | GARDENERS STORE |
| 7A | LWR. GR. FL. OFFICES / AHSR GPPATH | 38 | MCCARTHY WARD |
| 7B | GR. FL. PHARM. / DIAG. IMAGING | 39 | VERIGEN |
| 8 | EXECUTIVE BUILDING | 40 | REHAB DAY WARD |
| 8A | GR. FL. RADIOLOGY / DIA. IMAGING | 41 | FINANCE / MARKETING |
| 8B | 1st FL. EXECUTIVE SUITE | 42 | CONTINENCE OFFICES |
| 9 | COFFEE LOUNGE | 43 | TOILET |
| 10 | SWITCHBOARD / TOILET | 44 | FRED. BELL OFFICES / ECT. SUITE |
| 11 | GR. FL. O'NEARA WARD | 45 | CIRCLE OF CARE / OFFICES |
| 11A | 1st FL. ENDOSCOPY | 46 | HOLLYWOOD CLINIC |
| 12 | HUMAN RESOURCES | 47 | BRISLEE |
| 13 | OFFICES | 47A | LWR. GR. FL. EDWARDS WARDS (EAST & WEST) |
| 13A | INFECTION CONTROL OFFICE | 47B | GR. FL. STARCEVICH / DONALDSON WARDS |
| 14 | GR. FL. CAFETERIA | 47C | 1st FL. GRATWICK / BOSSE WARDS |
| 14A | 1st FL. FERTILITY | 47D | ROOF PLANT ROOM |
| 15 | JIM GORDON WARD | 48 | BRISLEE GENERATOR / TRANSFORMER |
| 16 | GR. FL. INFORMATION TECHNOLOGY | 49 | HOLLYWOOD SPECIALIST CENTRE |
| 16A | 1st FL. FERTILITY | 50 | MULTI-STORY CARPARK |
| 17 | LECTURE THEATRE | 51 | HOLLYWOOD MEDICAL CENTRE |

Hollywood Private Hospital, Monash Avenue, Nedlands
EXISTING DEVELOPMENT PLAN

Figure 4

Hollywood Private Hospital Masterplan 2014



5.0 STRATEGIC PLANNING CONTEXT

5.1 State Planning Policy

HPH is located immediately adjacent to the QEII Medical Centre that is currently being significantly expanded which is consistent with being identified as a “Specialised Centre”. The planning for QE II MC has included strategic planning direction for HPH.

Specialised Centres are identified and addressed in State Planning Policy 4.2 Activity Centres for Perth and Peel (See Appendix 1 for more detail).

5.2 Nedlands 2023, 2013 – 2023 Strategic Community Plan

As part of the City of Nedlands fulfilment of the Integrated Planning and Reporting Framework the Council has engaged the community in setting a vision and priorities for the coming decade.

The City has formulated a Strategic Community Plan which highlights particular priorities which Council will focus on, chiefly:

- Protecting the special character of Nedlands and its distinctive place in the urban fabric of the Western Suburbs and metropolitan Perth; and
- Continuing to provide the community infrastructure (such as roads and community facilities) to a standard befitting a liveable and thriving City.

The Masterplan shows that the future growth and development of HPH will contribute to the Council’s vision in a positive manner.

HPH has a responsible relationship with the community as illustrated in the Masterplan. It aims to support the communities vision and seeks to minimise any adverse impacts on the surrounding residential amenity by being a good neighbour.

5.3 Cultural and Indigenous Heritage

A desktop assessment indicated that there have been no sites of indigenous heritage significance identified on the site.

6.0 PROPOSED HOLLYWOOD PRIVATE HOSPITAL MASTERPLAN

6.1 Description of Masterplan

Development currently under construction or planned for construction as soon as possible is:

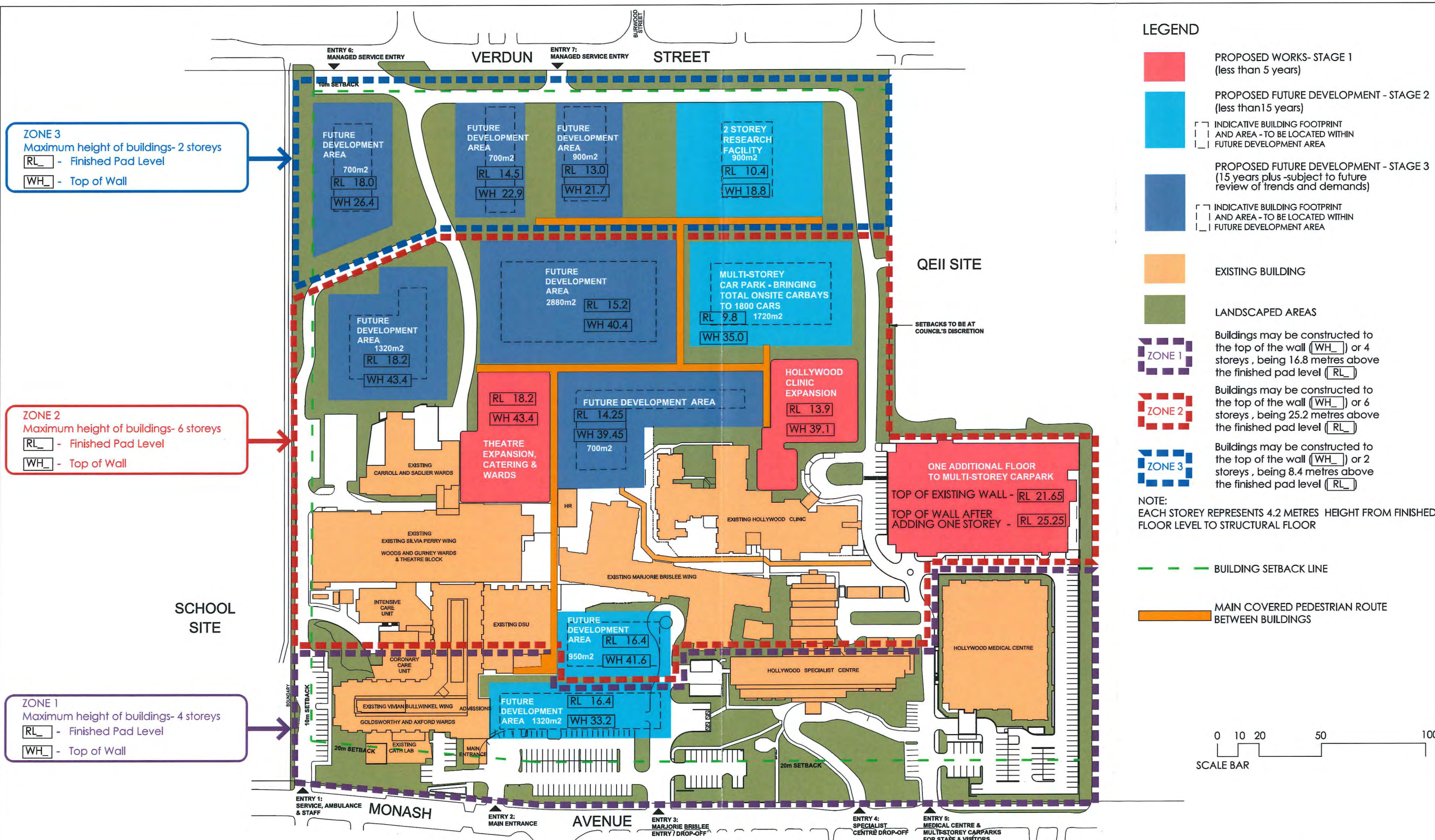
- the redevelopment of the Acute Adult Voluntary Mental Health Unit (now completed); and
- a new theatre block including kitchen and 60 bed wards (currently in preliminary planning stage).

Although there is no current long term building program proposed Council requires the preparation of a Masterplan for the hospital campus to:

- show existing development and those areas where redevelopment and new development may occur;
- establish the maximum height of buildings which would be permitted which is shown on Figure 8 as three distinct precincts which confine taller buildings to the central portions of the subject land;
- identify access and egress points and show the vehicle and pedestrian movement throughout the site;
- identify parking areas and the parking management requirements for the site;
- show perimeter boundary setbacks; and show landscaping throughout the campus.

The Masterplan shows that there are 3 distinct zones where building height (refer to Section 6.5.6 for detail) is identified:

- a) Zone 1 - An area adjacent to Monash Avenue extending into the site by between 60 metres on the western boundary to 80 metres on the eastern boundary where new buildings will be restricted to a maximum wall height of four storeys or 16.8 metres from an agreed structural floor level shown as RL _ on Figure 6 and so that any point does not exceed 18.3m above the RL;
- b) Zone 2 - The balance of the subject lot is the central portion where much of the land is lower than areas adjacent to Verdun Street and Monash Avenue and where buildings will be hidden in most cases by buildings closer to the roads. In this area new buildings would be permitted to be constructed to a maximum wall height of 6 storeys or 25.2 metres above an agreed structural floor level shown as RL _ on Figure 6 and so that any point does not exceed 26.7m above the RL.
- c) Zone 3 - An area adjacent to Verdun Street extending 80 metres into the subject site where new buildings would be restricted to a maximum height of two storeys or 8.5 metres high from an agreed structural floor level shown as RL _ on Figure 6 and so that any point does not exceed a height of 10.0m above the RL;

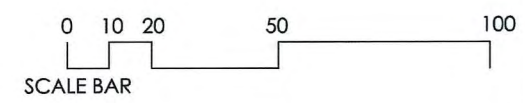


ZONE 3
Maximum height of buildings- 2 storeys
RL₋ - Finished Pad Level
WH₋ - Top of Wall

ZONE 2
Maximum height of buildings- 6 storeys
RL₋ - Finished Pad Level
WH₋ - Top of Wall

ZONE 1
Maximum height of buildings- 4 storeys
RL₋ - Finished Pad Level
WH₋ - Top of Wall

- LEGEND**
- PROPOSED WORKS- STAGE 1 (less than 5 years)
 - PROPOSED FUTURE DEVELOPMENT - STAGE 2 (less than 15 years)
 - INDICATIVE BUILDING FOOTPRINT AND AREA - TO BE LOCATED WITHIN FUTURE DEVELOPMENT AREA
 - PROPOSED FUTURE DEVELOPMENT - STAGE 3 (15 years plus -subject to future review of trends and demands)
 - INDICATIVE BUILDING FOOTPRINT AND AREA - TO BE LOCATED WITHIN FUTURE DEVELOPMENT AREA
 - EXISTING BUILDING
 - LANDSCAPED AREAS
 - ZONE 1
 - ZONE 2
 - ZONE 3
 - NOTE: EACH STOREY REPRESENTS 4.2 METRES HEIGHT FROM FINISHED FLOOR LEVEL TO STRUCTURAL FLOOR
 - BUILDING SETBACK LINE
 - MAIN COVERED PEDESTRIAN ROUTE BETWEEN BUILDINGS



Scale	Sheet Size	Date	STH Project No.	Drawing No.	Revision
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JOB :1620 DATE : 17-02-2014

Landvision Pty. Ltd.
Land Planning & Mapping Consultants
Suite 5, 16 Nicholson Road
Subiaco WA 6008
T | 08 9388 8181
F | 08 9388 8185
E | enquires@landvision.com.au



Hollywood Private Hospital, Monash Avenue, Nedlands MASTERPLAN

Figure 6

Hollywood Private Hospital Masterplan 2014

In addition the Masterplan shows:

a) Setbacks

All buildings are to have a minimum setback of 10 metres from the southern, western and northern boundaries unless otherwise agreed by Council. It is noted that the building setback along the eastern boundary with QEII is not a significant issue and shall be determined by Council and the new multi storey car park has a reduced setback along its northern face. There are no privacy, overshadowing, overlooking or other amenity issues along the eastern boundary as the adjacent use is also a major hospital site on which buildings already exist which are significantly taller and in some cases closer to the shared boundary than the standards proposed for HPH;

b) Proposed Works

The next stages of building includes the four proposed new buildings shown on Figures 6 and 8 as:

- expansion of Hollywood Clinic – already in progress
- theatre expansion/new kitchen and wards – planned for construction in 2013;
- a new four storey research facility – planned for 1 - 5 year timeframe;
- a multi - storey car park adjacent to Verdun Street to be constructed; and
- to add an additional floor to the existing multi - storey carpark – planned within the next 5 years.

c) Future Development Area

HPH has recently completed a significant building and improvement programme and has only a limited future development programme to be reflected in the Masterplan. Future development currently in the planning stages is shown on the Masterplan and described in b) above.

The Future Development Areas (FDA) cover portions of the campus where existing buildings may be renovated or replaced in the future and which must be consistent with the standards for development (setback, building height etc) in the approved Masterplan. HPH is not currently in a position with its long term planning to specifically designate proposed uses for each FDA and so the Masterplan shows the area within which future buildings would be located. An indicative building footprint and area have also been shown to assist in determining compliance with parking, plot ratio and other development standards.

d) Existing development shown on the Masterplan includes the recent improvements. Any future building would need to comply with the Masterplan including the agreed maximum building heights.

Hollywood Private Hospital Masterplan 2014

6.2 Summary of Development Standards

As each new development or redevelopment of buildings on the campus is proposed it will be subject to a new Application for Planning Approval which shall be consistent with the approved Masterplan as follows:.

Development Required	Standard	Masterplan Response	Masterplan requirements
<p>Parking: The Hospital requires 1 bay per 4 beds – see Schedule 3, TPS No. 2.</p> <p>As the Scheme has no standard for day patients the proposed allocation to provide for day patients, staff, visitors and doctors is 1 bay per 4 patients.</p> <p>The Medical Centre and Specialist Centre were required to provide 416 bays (@ 4.75 bays per 100m² g.l.a) when approved. These bays were provided and licenced for those purposes (See Notes at the end of this table).</p>		<p>There are a total of 1492 currently constructed bays on site comprising ambulance, service vehicle, doctors, disabled, general public (1209)) drop off, loading goods and motorcycle bays.</p> <p>The hospital has 492 beds ÷ 4 = 123 bays for overnight patients, staff and visitors.</p> <p>Day patients = 167 ÷ 4 = 42 bays.</p> <p>The Medical Centre and Specialist Centre when approved provided 416 parking bays as required by the City of Nedlands.</p> <p>Therefore the existing developments require a total of 581 bays on site and there are currently 1492 bays on site which is a surplus of 911 bays to provide for future development.</p>	<p>Based on parking requirements of 1 bay/4 patients the current parking surplus on site is 911 bays.</p> <p>Maximum total number of bays permitted to be built on site:1800</p> <p>All future car parking demand for new development provided for in the masterplan to be in accordance with the current town planning scheme.</p>
<p>Setbacks: 4.5 metres from all boundaries but greater if adjoining residential use.</p> <p>The site does not adjoin residential zones.</p>		<p>At proposed setbacks of Front (Monash Ave): 20.0m Westside: 10.0m Verdun St: 10.0m Setbacks are equal to or greater than the minimum setbacks required East boundary: Adjoins QE II where no setback is</p>	<p>Front (Monash Ave): 20.0m Westside: 10.0m Verdun St: 10.0m East boundary: nil setback</p>

Hollywood Private Hospital Masterplan 2014

	considered necessary and much taller buildings with small or no setbacks exist.	
Plot Ratio – Maximum plot ratio: 0.75 (Table 11 in TPS) for other than Residential development. There is no standard specified for a Hospital.	Due to large size of the site and the variety of existing buildings with different heights the plot ratio is not very relevant however the maximum plot ratio is 0.75 in TPS 2 which is inadequate for a hospital. The existing plot ratio is 0.72. Future development will result in replacement of existing buildings in many cases. The plot ratio proposed is 1.0.	<ul style="list-style-type: none"> • Max Plot Ratio for site = 1.0
Building Height As per Clause 5.11 Maximum Building Heights	See Part 6.5.6 in the Report	In accordance with Clause 6.5.6 and Figure 6..
Open Space and Landscaping (5.4.2). No minimum specified. Must landscape between street boundary and setback line.	The plan shows extensive areas of landscaped open space including the areas between the property boundaries and the setback line, which has been increased to 10.0m. The site in the Masterplan is estimated to show 25% as landscaped open space. See Appendix 2 for a full description and plan.	In accordance with Appendix 2 of the Masterplan with a minimum of 25% of the site.

Notes: Medical and Specialist Centre Parking

In 2009 a license was issued to establish the parking for the Hollywood Medical Centre and the Hollywood Specialist Centre. Although part of the HPH campus the centres are on separate strata lots. The licence states the following:

Lot 562 Car Parking Requirements means that the provision of adequate car parking for Lot 562, and any associated uses or development on Lot 562, in perpetuity for the approved use on Lot 562, such car parking to comprise not less than 100 car bays to be provided on Lot 564.

Lot 563 Car Parking Requirements means the provision of adequate car parking for Lot 563, and any associated uses or development on Lot 563, in perpetuity for the approved use on Lot 563, such car parking to comprise no less than 316 bays

Hollywood Private Hospital Masterplan 2014

to be provided on Lot 564, in accordance with Condition 3 and advice note 7 of the Subdivision Approval.

The Car Parking Licence Deed is a Deed made between:

- The Owners of Hollywood Specialist Centre (Lot 562);
- The Owners of Hollywood Medical Centre (Lot 563); and
- The City of Nedlands.

The deed formalised the requirement to provide and retain a minimum of 416 car parking bays on Lot 564 which is owned by Ramsey Hospital Holdings. Lot 564 comprises the whole of the hospital campus excluding the Medical Centre and Specialist Centre.

Ramsey Hospital Holdings granted a licence in favour of the owners of each Strata Company owning Lots 562 and 563 to ensure their individual parking requirements are met for the use of the proprietors and/or the occupiers of the Medical Centre and Specialist Centre.

6.3 Services Infrastructure

Ongoing upgrading of infrastructure will be required to accommodate future development. This will be a combination of both capacity and plant, in order to ensure that adequate electrical, hydraulic, communications services, chilled water and steam, waste collection and various other services will be available for future development.

Figure 3 shows there is an easement crossing the subject land from approximately the north – west to south – east corner which contains the sewer line and any development must ensure ongoing access to the sewer is retained. This easement is vested in the Water Corporation.

As part of the preparation of the Masterplan BPA Engineering provided a Local Water Management Strategy (LWMS) for the future development of the Hollywood Hospital located in Nedlands (See Part 2: Background Reports).

The Strategy outlines the quantity and quality measures for the proposed future development of Ramsay Hollywood Private Hospital to meet the design requirements of the Department of Water (DoW) and Better Urban Water Management (October 2008).

Water quantity management outcomes were based on design principles found in Australian Rainfall and Runoff (AR & R 1987). Peak flows were calculated using the rational method utilizing the latest rainfall data and catchment area for the proposed development. The design storms in accordance with the City of Nedlands requirements were the 100 year ARI (Average Recurrence Interval) for flood prevention of future buildings with the 1 in 20 ARI stored on site.

Water quality will be managed in accordance with DoW by providing Best Management Practices for the storm event (1 Yr 1 Hr ARI) that is expected to contain the highest concentration of pollutants.

Hollywood Private Hospital Masterplan 2014

It is proposed to best manage stormwater quantity and quality through the provision of stormwater retention systems.

In respect to stormwater drainage geotechnical investigations have been carried out as part of previous development on the site. The site is generally SP sand (Spearwood) with good drainage characteristics. Soakage via soak wells or underground stormwater retention systems are proposed to best manage stormwater quality and quantity.

Existing storm water drainage is via soak wells. The existing buildings on the site have local storage for 1:10 year storm with overland flow path for greater storm events. This is in line with the City of Nedlands Development Approval and building license conditions at the time of approval.

Any new structures will have as a minimum, local storage via soak wells for a 1:20 year storm event with overland flow for a greater storm event or to store the 1 in 100 year event. This is the current City of Nedlands requirement.

All overland flow resulting from storm events that exceed the designed on-site storage capacity shall be disposed of to the satisfaction of the City, with no discharge from the property being permitted to flood into the QEII site.

Additional underground storage using stormtech drainage cells or similar system can be provided at the boundary with Sir Charles Gardiner hospital if required.

6.4 Parking and Vehicle and Pedestrian Circulation

6.4.1 Existing Parking and Access

HPH is highly accessible due to its favourable location in terms of the regional transport network. However parts of the road network servicing the site already experience significant congestion during peak periods and any expansion of development at HPH that will generate additional traffic will impact on this congestion. Future development on the site will therefore be limited by the capacity of the transport network to provide access to the site. This is directly related to the amount of car parking provided for traffic arriving at (and leaving) the site during peak periods.

6.4.2 Future Access and Parking

There will be 1500 parking bays on site following construction of the Acute Adult Voluntary Mental Health Unit. The proposed Masterplan (Figure 6) shows that the majority of the parking will be provided in the existing multi – storey car park and a future 2 deck car park. A small percentage of the parking will be retained at grade, primarily along Monash Avenue. In addition it is proposed to construct one extra level of parking to the existing multi – storey car park.

Retaining 1500 parking bays as shown on the Masterplan is consistent with the resolution of the WAPC discussed in Part 2: Background Reports and which is as follows:

Hollywood Private Hospital Masterplan 2014

“Advise the City of Nedlands and Hollywood Private Hospital that the Commission is aware of the maximum limit of 1800 car parking spaces in the approved site structure plan. The Commission would wish to be consulted on any proposal which would lead to a total number of car parking spaces exceeding 1800 bays. The Commission further would be minded to introduce a Clause 32 resolution requiring any development exceeding 1800 bays to be referred to the Commission for its determination)”.

In addition a travel plan (incorporating a parking management plan) has been developed and occasionally reviewed which sets out the specifics of parking allocation, pricing, funding, staging and contributions and other relevant matters.

The QEIIMC Access and Structure Plan relevant to the strategy to manage parking at QEII and HPH is only going to be successful in reducing the reliance on private vehicles if the availability and frequency of public transport increases to cater for increased demand and a 24 hour service.

In the QEII/UWA/HPH Public Transport Masterplan, the following is stated:

“To achieve the mode share targets for public transport use to and from UWA, QEIIMC and HPH, it is essential that the whole plan be adopted. Bus priority is an integral part of the plan and should accompany the proposed service improvements. The bus priority projects should be seen as a complete package which will ensure consistency of running times throughout the day, add to the reliability of the services for passengers and afford the minimum ongoing operating costs to government”

The primary access/egress points for the QEII Medical Centre are presently from Aberdare Road and Monash Avenue, with no direct vehicle access available from Winthrop Avenue. The proposed multi deck carpark is proposed to directly access Winthrop Avenue, with no through access to Hospital Avenue or the surrounding at-grate car park except for emergency vehicles.

As part of the QEII Medical Centre Masterplan, a traffic study was undertaken in order to assess the traffic impacts of an expansion of the Medical Centre site.

The studies were undertaken in 2007 and 2009, with further revisions undertaken in 2010. An overview of the results of the studies indicates that the road network has sufficient capacity to accommodate the increase in traffic resulting from the expanded Medical Centre site, and that the proposed entrance directly from Winthrop Avenue will not adversely affect traffic flow in this location.

Extrapolating these findings to the minor increase in traffic generated by any expansion of HPH can be accommodated with only minor impacts on surrounding roads. In assessing traffic studies for QEII, the City of Subiaco concluded that the roads and intersections which would be affected have sufficient capacity to accommodate the anticipated increase in traffic volumes.

Until public transport can provide an adequate 24 hour service HPH will continue to rely mainly on the use of private vehicles, albeit while seeking to increase the modal split and reduce reliance on the use of private vehicles.

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To ensure that the future development of HPH would not adversely affect the surrounding road and cycle network Cardno prepared a transport assessment reproduced in full in Part 2: Background Reports. In summary the Hollywood Private Hospital Transport Assessment , Cardno June 2013 advised the following:

“The scope of this report was discussed with the City of Nedlands in May 2013 and agreement reached on the level of assessment for each of the scenario years and the critical intersections to be assessed.

Three scenarios of committed and possible future development have been considered in this assessment, as follows:

- > 0-5 years (2018 assessment year) - Short term, committed development*
- > 6-15 years (2028 assessment year) – Medium term, potential development under consideration but not finalised*
- > 16+ years (beyond 2028) – Long term, possible future development*

The 2018 assessment year is considered in detail as all land uses are committed. The 2028 assessment year is also considered in detail, based on assumptions about the likely form and scale of development during this period. The purpose of this assessment is to demonstrate that the scale of potential future development in this time period will not have significant impacts upon the surrounding road network. Detailed assessment of possible future development beyond 2028 has not been undertaken as this future development is subject to future changes in trends in health care provision and commercial viability.

As part of this report, an analysis was undertaken to determine the impact that each stage of the HPH Masterplan is likely to have on the surrounding road network. Background traffic growth was assumed to increase proportionally to the increase in the QEI parking cap as this is the only major traffic generator in the vicinity of the study area, while the increase in development traffic was estimated using traffic generation rates determined from surveys of existing site traffic during the AM and PM peak hours.

The analysis found that the development traffic is not likely to have any significant impacts on the surrounding traffic network for the 2018 and 2028 assessment years. For the 2028 assessment year, it was found that delays for traffic turning right from Monash Avenue into Smyth Road during the PM Peak Hour increase to approximately 45 seconds, with an average queue length of approximately 9 vehicles. Construction of a small roundabout at this intersection would reduce the delays for right turning vehicles and improve the operation of the intersection. However, it must be noted that if background traffic growth is lower than the conservative estimate then any delays for right turning vehicles will be lower than stated above.

Traffic generation at HPH beyond 2028 will generally be restricted by the availability of parking on site. As the 1800 space parking cap is reached by 2028, any further person trips generated by development at HPH will need to be

Hollywood Private Hospital Masterplan 2014

accommodated either in off-peak times when parking is available on site or by alternative modes such as public transport, walking and cycling. To assist with mode shift, HPH has been operating with a Green Transport Plan since 2004 and it is proposed that this Plan will be reviewed and updated by Cardno in 2013 to reflect current conditions. Consistent with this plan, significant improvements to end of trip facilities are proposed as part of the Stage 1 (2018) development and further improvements will be provided as part of future development beyond 2018.

An appraisal of public transport accessibility for workers and visitors to HPH has been undertaken. HPH has reasonable accessibility by public transport compared to most other locations in Perth, however it does suffer from longer walking distances from most bus routes compared to neighbouring Queen Elizabeth II Medical Centre (QEII MC) which is the focal point for public transport in the area. Recommendations have been made for gradual improvements over time to ensure that an appropriate level of service is provided to encourage HPH visitors and employees to shift from driving to sustainable transport modes”.

The majority of arrivals by private transport will arrive at the entrances off Monash Avenue. Visitors and patients may park in designated areas on Monash Avenue or by direct access to the multi – deck carpark via Gate 5 on Monash Avenue. No change to the existing entry and exit driveway crossovers along Monash Av was considered necessary by Cardno in its Traffic Assessment, June 2013 reproduced in the Part 2: Background Reports.

Incremental increases of traffic volumes to and from the site onto Verdun Street require Council approval. The approval will be based on the principle that Verdun Street is a local access road and accordingly is restricted in its capacity to carry traffic volumes.

Major bus routes service the hospital and surrounding areas being Routes 23, 24 and 25 which operate 7 days per week with regular services from Perth and East Perth. The main gap in this service is from about 11:05pm to 5.27 am.

Accepting that HPH is a major trip generator, HPH has sought to reduce single occupancy car travel to and from the Hospital and to encourage ‘green’ alternative modes of travel. Key initiatives include preparing and implementing a “Green Transport Plan” (see 6.4.3) and monitoring activity to assist in the future planning and management of parking and access.

The current and ongoing redevelopment of the site has made managing travel and parking demand a pertinent issue. As the facilities continue to grow, so too will the number of people accessing the site on a day to day basis. Proactively dealing with the issue before it becomes critical is a priority for HPH. The ongoing work by HPH to manage parking and access is reflected in the Masterplan which anticipates a range of possibilities for a modal shift from car to more sustainable travel modes while providing sufficient parking in the short term to cater for the particular needs of HPH.

Apart from the multi-storey car park the balance of parking for visitors, patients, doctors, specialists and staff is provided at grade (ground level) (See Figure 7). There is a second multi – storey car park which will be developed when required and it will replace parking lost as redevelopment occurs.

Hollywood Private Hospital Masterplan 2014

To minimise the impact on adjacent residents the proposed two deck car park has been relocated to be setback approximately 80 metres from housing on Verdun Street. The proposed Research Facility has been located at least 10 metres back from Verdun Street and in front of the multi – storey car park.

A requirement for any future multi – level car parking facility aimed to reduce the impact of noise on the neighbours will be that a construction method will be used for the proposed facility that will not generate the noise associated with vehicles driving over metal plates.

As shown on the Masterplan the proposed developments would have a positive impact on the site by maximising the efficiency of land used for parking purposes, which increases the availability of land within the site for the expansion of medical facilities. It will also improve its operation and function.

Emergency vehicles, patients, visitors and staff primarily enter and leave the campus via one the of the 5 entries along Monash Avenue. These access points are well spread and signposted along the almost 400 metres frontage to Monash Avenue.

There are only two other entry/exit points which are located on Verdun Street and which are used by most of the service vehicles. As an initiative to reducing the impact on residences on Verdun Street these entries are only open during working hours for 5 days per week (excludes weekends).

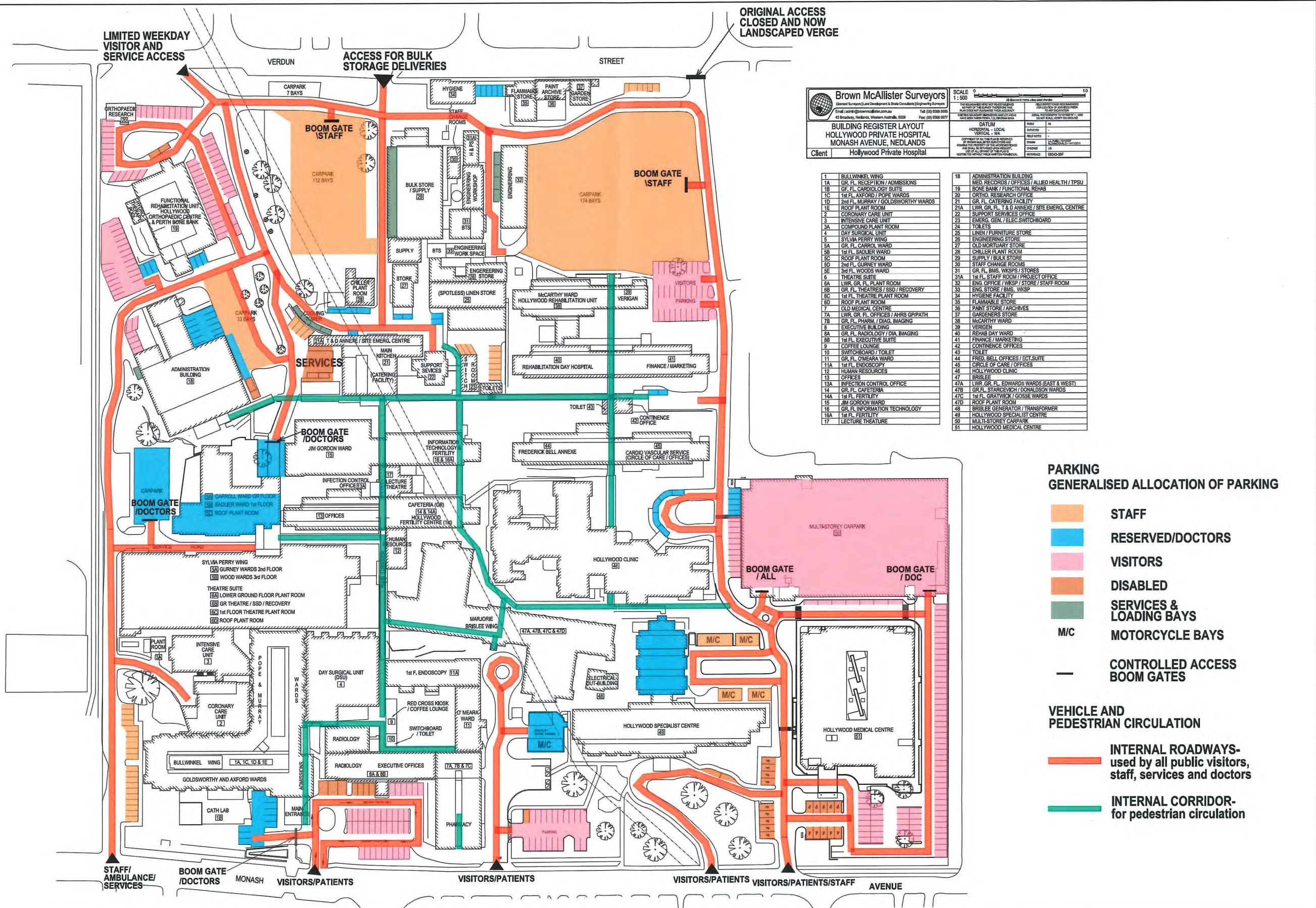
The Masterplan would assist in ensuring that the objectives of the Western Australian State Government for HPH through the QEII/MC Masterplan and Access and Structure Plan could be achieved, and would ultimately assist in ensuring that the redevelopment of the overall site could be achieved. This is as without the development of up to 1800 car parking bays, the function and operation of HPH is likely to be greatly affected.

During the formulation of the Masterplan and consideration of parking and access, the public's comments in respect to the forward plan for QEII and the proposed multi-deck car park have been considered. In light of the public's comments above, the following has been the aim:

“to coordinate and ensure that development is of a high quality and is undertaken in an efficient and environmentally responsible manner which:

- i. makes optimum use of the city's infrastructure and resources;
- ii. promotes an energy – efficient environment; and
- iii. respects the natural environment. ”

The provision of car parking to service HPH is intended to limit vehicle movements to a level which is based upon a significant reduction in employees travelling to work by private car. This will assist in ensuring that the traffic movements associated with the expanded facility do not result in negative impacts to the surrounding road network, and will also contribute to energy efficiencies and other environmental benefits through reduced car usage.



Brown McAllister Surveyors
 Licensed Surveyors (Land Development & State Consultants) (Highway) Surveyors
 Email: info@brownmcallister.com.au Phone: (08) 9388 8181
 41 Broadway, West Perth, Western Australia, 6008 Fax: (08) 9388 8877

BUILDING REGISTER LAYOUT
HOLLYWOOD PRIVATE HOSPITAL
 MONASH AVENUE, NEDLANDS

Client: Hollywood Private Hospital

SCALE: 1:500

DATUM: HORIZONTAL - LOCAL
 VERTICAL - AHD

PROJECT NO: 13/2012/0001
 SHEET NO: 13/2012/0001/01
 DATE: 28/10/12

1	BULLWINKEL WING	18	ADMINISTRATION BUILDING
1A	GR. FL. RECEPTION / ADMISSIONS	19	MED. RECORDS / OFFICES / ALLIED HEALTH / TPSU
1B	GF. FL. RADIOLOGY SUITE	20	BONE BANK / FUNCTIONAL REHAB
1C	1st FL. AXFORD / POPE WARDS	21	CRICO. RESEARCH OFFICE
1D	2nd FL. MURRAY / GOLDSWORTHY WARDS	21A	GR. FL. CATERING FACILITY
1E	ROOF PLANT ROOM	22	LWR. GR. FL. T & D ANNEXE / SITE EMERG. CENTRE
2	CORONARY CARE UNIT	22A	SUPPORT SERVICES OFFICE
3	INTENSIVE CARE UNIT	23	EMERG. GEN. ELEC. SWITCHBOARD
3A	COMPOUND PLANT ROOM	24	TOILETS
4	DAY SURGICAL UNIT	25	LINEN / FURNITURE STORE
5	SYLVIA PERRY WING	26	ENGINEERING STORE
5A	GR. FL. CARROL WARD	27	OLD MORTUARY STORE
5B	1st FL. SADLER WARD	28	CHILLER PLANT ROOM
5C	ROOF PLANT ROOM	29	SUPPLY / BULK STORE
5D	2nd FL. GURNEY WARD	30	STAFF CHANGE ROOMS
5E	3rd FL. WOODS WARD	31	GR. FL. BMS. WSPS / STORES
6	THEATRE SUITE	31A	1st FL. STAFF ROOM / PROJECT OFFICE
6A	LWR. GR. FL. PLANT ROOM	32	ENG. OFFICE / WSPS / STORE / STAFF ROOM
6B	GR. FL. THEATRE / SSD / RECOVERY	33	ENG. STORE / BMS. WSPS
6C	1st FL. THEATRE PLANT ROOM	34	HYGIENE FACILITY
6D	ROOF PLANT ROOM	35	FLAMMABLE STORE
7	OLD MEDICAL CENTRE	36	PAINT STORE / ARCHIVES
7A	LWR. GR. FL. OFFICES / AHRS GPPATH	37	GARDENERS STORE
8	EXECUTIVE BUILDING	38	MCCARTHY WARD
8A	GR. FL. RADIOLOGY / DIA. IMAGING	39	VERIGEN
8B	1st FL. EXECUTIVE SUITE	40	REHAB DAY WARD
9	COFFEE LOUNGE	41	FINANCE / MARKETING
10	SWITCHBOARD / TOILET	42	CONTINENCE OFFICES
11	GR. FL. OMSARA WARD	43	TOILET
11A	1st FL. ENDOSCOPY	44	FRED. BELL OFFICES / ECT SUITE
12	HUMAN RESOURCES	45	CIRCLE OF CARE / OFFICES
13	OFFICES	46	HOLLYWOOD CLINIC
13A	INFECTION CONTROL OFFICE	47	BRISLEE
14	GR. FL. CAFETERIA	47A	LWR. GR. FL. EDWARDS WARDS (EAST & WEST)
14A	1st FL. FERTILITY	47B	GR. FL. STARCEVICH / DONALDSON WARDS
15	JIM GORDON WARD	47C	1st FL. GRATWICK / GOSSE WARDS
16	GR. FL. INFORMATION TECHNOLOGY	47D	ROOF PLANT ROOM
16A	1st FL. FERTILITY	48	BRISLEE GENERATOR / TRANSFORMER
17	LECTURE THEATRE	49	HOLLYWOOD SPECIALIST CENTRE
		50	MULTI-STOREY CARPARK
		51	HOLLYWOOD MEDICAL CENTRE

- PARKING**
GENERALISED ALLOCATION OF PARKING
- STAFF
 - RESERVED/DOCTORS
 - VISITORS
 - DISABLED
 - SERVICES & LOADING BAYS
 - M/C
 - MOTORCYCLE BAYS
 - CONTROLLED ACCESS BOOM GATES
- VEHICLE AND PEDESTRIAN CIRCULATION**
- INTERNAL ROADWAYS- used by all public visitors, staff, services and doctors
 - INTERNAL CORRIDOR- for pedestrian circulation

Hollywood Private Hospital, Monash Avenue, Nedlands
VEHICLE AND PEDESTRIAN ACCESS AND CIRCULATION AND PARKING DISTRIBUTION

Figure 7

Hollywood Private Hospital Masterplan 2014

The dependence on private vehicles will be further reduced by the improvement and increased availability of public transport including the potential development and alignment of a light rail network close to HPH. If constructed, it would assist in reducing dependence on private vehicles by employees travelling to work.

It is therefore concluded that the increase in traffic to HPH will be insignificant when compared to that generated by the expansion of QEII Medical Centre.

6.4.3 Green Transport Plan

The Department of Health has developed the "Access and Parking Strategy for Health Campuses in the Perth Metropolitan Area" (APSHC), July 2010.

This Strategy provides a framework under which each public health campus in the metropolitan area can deliver consistent policies and practices towards access management. Although as a private hospital HPH is not listed, HPH has developed a "Green Transport Plan" which is consistent with the intent of the APSHC requirements for a Travel Plan.

The Green Transport plan has been discussed in Part 2: Background Reports and will be reviewed in 2013 to reflect current conditions. Significant improvements are planned for end of trip facilities up to completion of and beyond Stage 1 (2018).

HPH has had a green transport plan in operation since October 2004. The aim of the plan is to encourage and facilitate changes in their workers' transport practices to more healthy and environmentally friendly forms of transport to and from work, i.e. cycling, car-pooling, public transport and walking. The success of the plan relies on people making changes to their existing commuting travel arrangements. The hospital supports our workers in making the change easier by way of better information, facilities and incentives.

The following details the last five years of worker participation levels in the Travel Smart Program:

Year	Total participants	Total kms travelled	Total trips	Average km per trip
2012	173	151905	9852	15.42
2011	171	114796	7972	14.40
2010	121	80997	5453	14.85
2009	86	49545	3480	14.24
2008	101	70395	4856	14.50

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The success of the program is demonstrated by the increased awareness and participation by employees in the program. HPH will continue to develop initiatives to increase the use of alternatives to private vehicle use for access to HPH.

Access to HPH via alternative forms of transport will be regularly subject to review as the public transport availability improves. The initiative of the State government to develop a light rail service along Thomas Street with a station close to Monash Avenue will result in further reduction in the reliance on private vehicles..

6.4.4 End of Trip Facilities

As part of encouraging modal shift to bicycles and walking HPH has provided and has plans to expand end of trip facilities.

Existing end of trip facilities at HPH include:

- > Over 500 lockers, currently used mainly by theatre and ward staff who get changed and/or shower before or after a shift
- > Approximately 25 showers, including a mixture of male, female and unisex facilities
- > Approximately 50 u-rail bicycle parking spaces
- > Hairdryers, irons and laundry service (for theatre staff)

Many of these facilities are provided in the course of enabling staff to fulfil their hygiene obligations, or enable staff to change to/from uniforms at the start or end of shifts. However, these facilities are not restricted to only staff who need them for work, they can be used by any staff member as desired.

Future Provision

HPH recognises the importance of high quality end of trip facilities to encourage mode shift towards cycling. Therefore, as part of the Stage 1 (2018) development, the following improvements are proposed to the existing end of trip facilities:

- > Approximately 100 secure undercover bicycle parking spaces – located within 3 'cage' facilities to be spread around the site. These will be intended for staff use.
- > An additional 50 u-rail type bicycle parking spaces to be located near the entrances of each building to ensure high user convenience and passive surveillance. These will be intended for visitors, deliveries and other short term users who do not require secure parking.
- > An increase in the number of lockers to over 600.
- > An additional 5-10 showers.
- > Investigate the provision of a dry cleaning or laundry service over the weekend, so that staff who cycle to/from work do not need to transport their clothes to/from work.

Hollywood Private Hospital Masterplan 2014

In addition to providing new facilities, existing facilities will be more widely publicised to ensure that staff are aware of their options for changing their travel behaviour. This is one of many strategies to be incorporated in the revised HPH Green Transport Plan.

The proposed end of trip facilities will be of significant benefit to staff who currently cycle to/from work and act as a large incentive for other staff to shift to cycling where possible.

As future development progresses beyond 2018, further end of trip facilities will be provided in existing and new buildings to cater for the increase in staff and expected increase in staff cycling to work. The details of these measures will be determined at the DA stage of future developments.

6.4.5 Pedestrian Way-finding and access

Pedestrian way finding is a key feature of the existing hospital design (as shown in Figure 8). The hospital is planned around a north-south corridor which links all major functions and vertical circulation nodes. This simplifies way-finding and allows patients and visitors to orientate themselves easily which reduces stress and improves the hospital experience. The simple and direct internal way-finding is mirrored externally where key public entrances and car parking provisions are linked to the main internal corridors via simple and obvious access pathways.

The proposed new expansion of the hospital builds on both the internal and external way-finding precepts already established.

Successful way-finding and access should be largely intuitive and self-explanatory but the hospital will complement the way-finding strategy with highly visible colour coded signage appropriately designed and located.

6.5 Urban Design Principles

6.5.1 Site Planning

The current Hollywood Clinic expansion proposal and future site redevelopment opportunities continue to respond to the Hospital's evolving clinical needs and address an aging building stock and consolidation of existing site facilities. Any future redevelopment identified as part of the Masterplan will explore opportunities to enhance the streetscape along Monash Avenue and Verdun Street within its boundaries and by agreement with the City of Nedlands to improve the adjacent street verges. Recently, the verge along Verdun Street was landscaped by HPH.

Opportunities to enhance the streetscape along Verdun Street and Monash Avenue include, but would not be limited to:

- a) Maintaining and improving the landscaping in the front setback and other areas;
- b) Maintain and improve all signage along both streets;

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- Note that the signage along Monash Avenue has been recently upgraded to a very high standard.
- c) Continue to develop new buildings consistent with the Masterplan which requires buildings with a lower height closer to Monash Avenue and Verdun Street (2 Storey max and 4 Storey max respectively), taller buildings up to 6 storeys would be developed in the central lower portion of the site; and
- d) Continue to develop all new buildings to have a high standard of visual amenity and presentation within the site.

6.5.2 Built Form

The proposed new developments within the HPH site will contribute to and support the established architectural language along Monash Avenue. A blend of contemporary and traditional materials such as masonry, glass, and facade panels binds the new and existing buildings on the site.

As an example, a peripheral building, the proposed Hollywood Clinic extension, offers the opportunity to continue with the aesthetic of the existing single storey clinic by the use of masonry, pitched tiled roof and punched windows.

6.5.3 Safety and Security

Numerous levels of security exist on the site and will be incorporated into any new development including:

- Maximise the opportunity for passive surveillance through building and open space design;
- Installation and monitoring of a CCTV security system site wide;
- Electronic control of all key access points;
- After hours lockdown of selected access points;
- Lighting to be designed to illuminate all pedestrian and vehicle paths, roads and corridors;
- Avoidance of obstacles and landscaping which may impede visual control of public areas through sensitive design cognisant of design to prevent crime and improve individual safety on the campus; and
- Vandal proof material selection and treatments.

At present no perimeter security fencing is being considered for the site.

6.5.4 Sustainable Design Features

Environmentally Sustainable Design (ESD) is a key priority for future developments on the HPH site. There are many opportunities being considered or which will be considered for all future development regarding ESD. Initiatives and design should aim to provide:

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- Overall energy reduction and direct reduction in running costs;
- High performance facades which facilitate daylight penetration;
- Reduced lighting and small power loads;
- Improved indoor air quality through improved material selection and filtration;
- High efficiency HVAC systems;
- Renewable energy systems such as solar thermal and solar photovoltaic;
- Enhanced and effective commissioning and building tuning;
- Advanced technology vertical transportation;
- Metering and measuring outcomes;
- Interior design and procurement strategies which utilise green building products;
- Material selection and recycling; and
- Training staff on correct building operation.

6.5.5 Universal Access

As a hospital the principles of Universal Access for people of all abilities are implicitly relevant. All aspects of current and future developments will embody the aspirations of the Universal Access Policy as well as the regulatory requirements of the BCA and the Disability Standards on Access to Premises.

6.5.6 Building Height

The current TPS No. 2 includes provisions to limit the maximum height of vertical walls to 8.5m and the overall height of building to 10.00m. These provisions work for average sized lots however the HPH site is over 11.0ha in area and has a significant fall from the western to the eastern boundary adjacent to QE11MC. The overall fall along Monash Avenue is 13.0 metres and along Verdun Street approximately 11.2 metres. There is an even greater fall across the site from 26m in the south-west corner to 7.8m in the north-east corner. To further complicate the slope analysis to determine maximum height of buildings and to establish a "relative level" from which it is measured the site undulates having highs and lows within its boundaries.

In addition when undertaking redevelopment new buildings must also be designed to connect to existing floor level services and other facilities. In view of these considerations and to avoid any future confusion the Masterplan divides the site into three zones to make it easier to determine a relative ground level more consistent with the existing and adjacent development.

As shown on Figure 6 the site is divided into three zones:

Zone 1: This zone is adjacent to Monash Ave and is limited in height to 4 storeys. To further clarify the maximum building height the RL (relative level) for each building footprint has been determined and is shown on the plan for each zone. In addition the maximum wall height is shown as "Top of the Wall" and has been measured from the finished pad level (shown as the RL) eg. based upon 4.2 metres per storey the maximum wall height or top of the wall is RL 16.4m + 16.8m (for 4 storeys) = WH 33.2m or 34.7 metres to the roof ridge line.

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Zone 2: Comprises the middle portion of the site where the maximum building height or top of the wall is 6 storeys or 25.2 metres above the RL or 26.7 metres to the top of the roof ridge line eg. RL = 18.2m + 25.2 for 6 storeys = 43.4m to top of the wall or 44.9 metres to the roof ridge line.

Zone 3: Comprises the area closest to the houses along Verdun Street where a lower building height is proposed to be 2 storeys or 8.4 metres wall height or 10.0m to the roof ridge line eg. RL = 18.0m + 8.4m for 2 storeys = 26.4 metres to top of the wall or 27.9 metres to the roof ridge line.

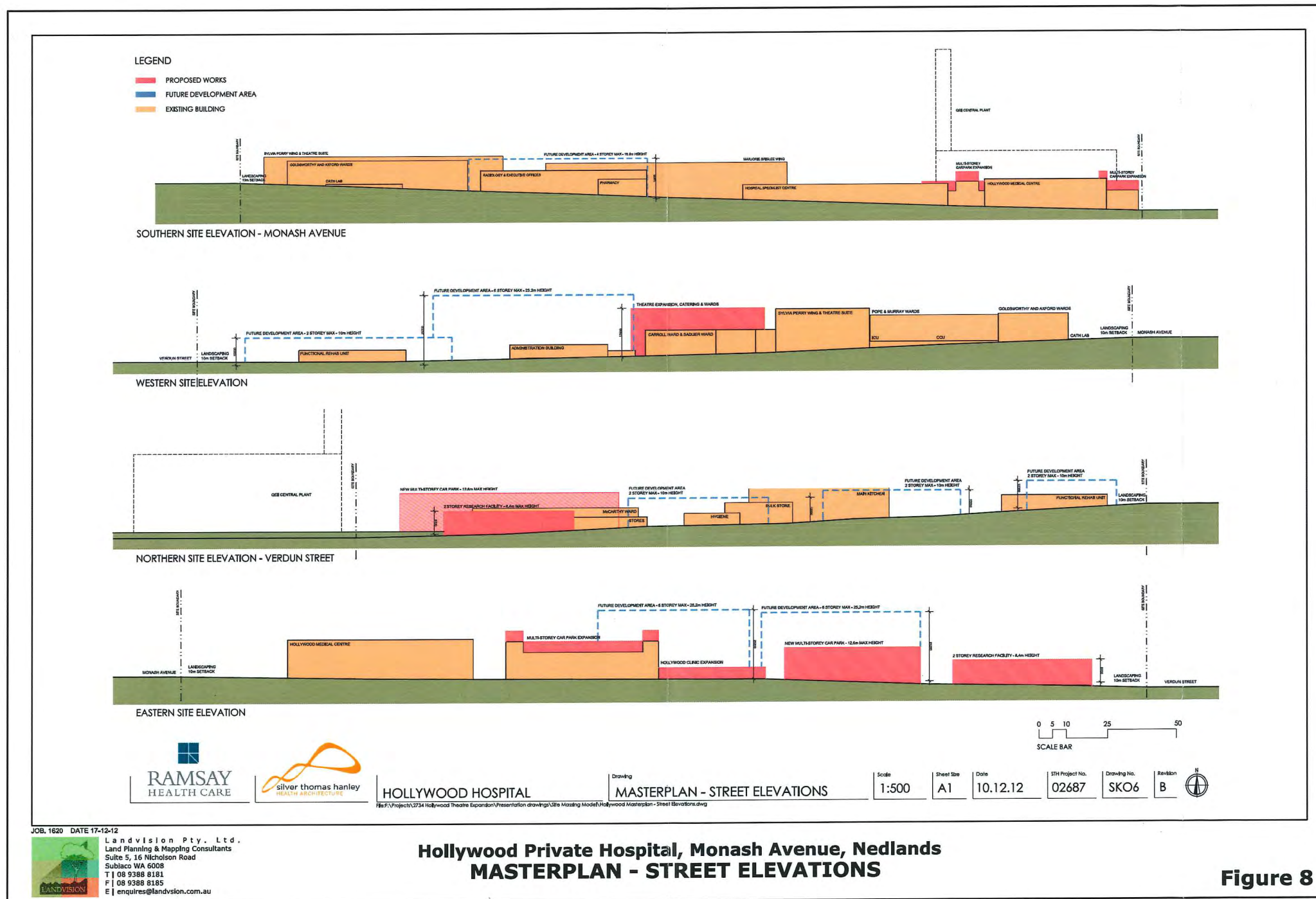
The planning and design of buildings and the proposed limitation to heights aims to prevent as much as possible any adverse impacts on the adjacent residential amenity on Verdun Street (see Figures 8 and 9). The western boundary is adjacent to Hollywood Primary School and recreation grounds, the southern boundary is opposite Monash Avenue and the Hollywood Village and QE 11 adjoins the eastern boundary where buildings are already significantly higher than proposed in this Masterplan. Accordingly it is reasonable to support the proposed maximum building heights shown on the Masterplan as with significant setbacks and the proposed limit on building heights there will be little impact, if any, on surrounding properties.

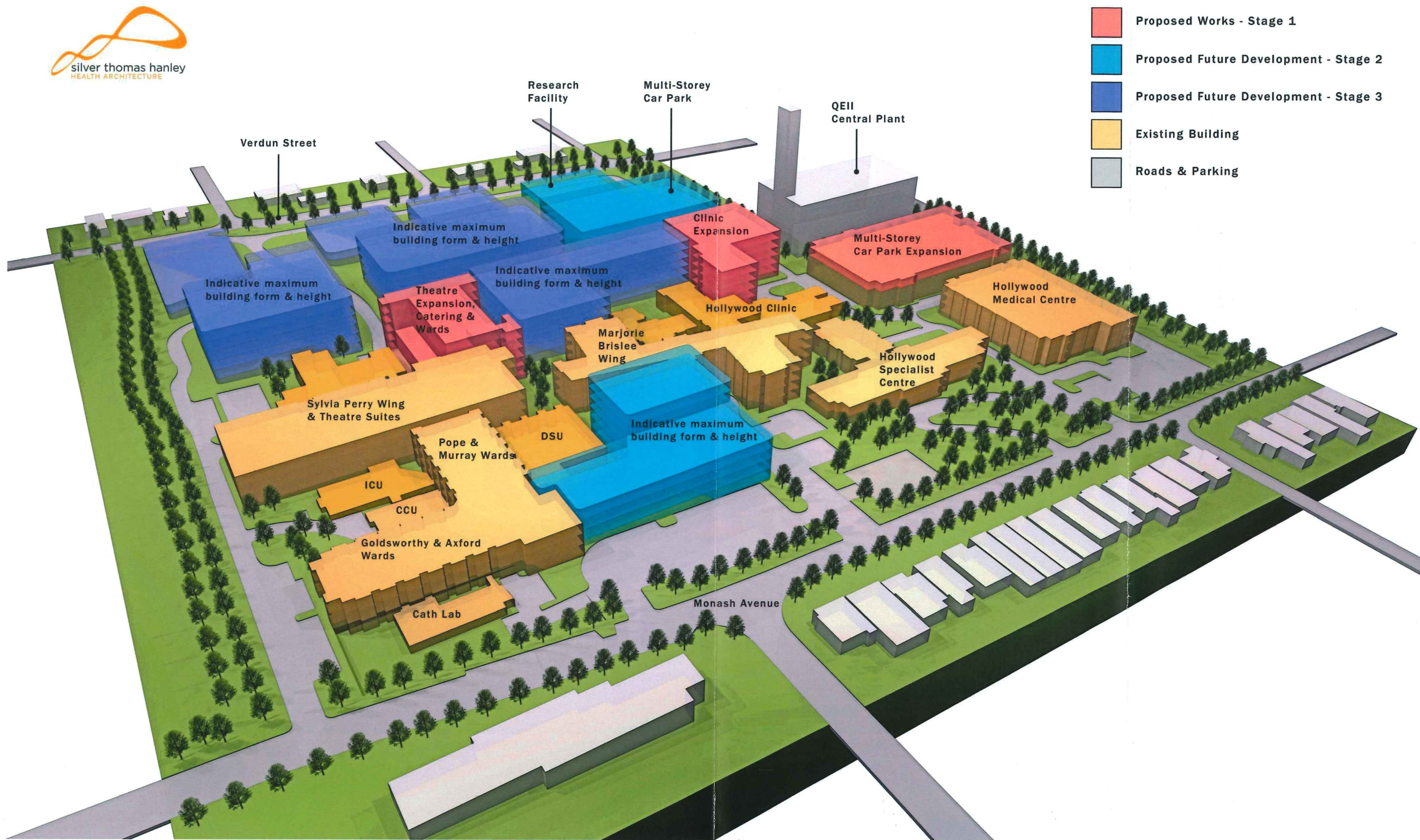
6.5.7 Landscaping

The existing landscape areas predominantly provide a landscaped garden edge with some screening hedges at pedestrian level around much of the site and discrete landscaped shelter areas for visitors, patients and staff, in court yards and between buildings. The Site Analysis in the HPH Landscape Plan in Appendix 2 shows existing features including landscaped areas and the many mature trees on the site.

The existing and ongoing landscaping will reflect the following principles:

- retention of existing mature trees wherever possible;
- providing attractive and usable garden areas;
- looped and shaded pathways;
- shading and shade trees including in tree planter boxes;
- water and other features;
- water wise planning;
- diverse and well maintained gardens
- areas to be enjoyed by patients and visitors for rest and contemplation;
- appropriate signage and lighting; and
- varied and interesting hard landscaping, paving design and texture.





JOB. 1620

Landvision Pty. Ltd.
 Land Planning & Mapping Consultants
 Suite 5, 16 Nicholson Road
 Subiaco WA 6008
 T | 08 9388 8181
 F | 08 9388 8185
 E | enquires@landvision.com.au

**Hollywood Private Hospital, Monash Avenue, Nedlands
 MASTERPLAN - MASSING MODEL**

Figure 9

Hollywood Private Hospital Masterplan 2014

The Masterplan shows that existing and future landscaped areas total 25% of the site.

The Masterplan shows that the landscaping, signage and bordering walls successfully integrate the campus with Monash Avenue. The existing landscaping on Monash Ave will be maintained in its current form, with clear sight-lines, lighting and signage for pedestrians and vehicles entering and leaving the property. The internal perimeter road on the western boundary is adjacent to a pedestrian access lane and does not have a negative impact on this area.

There is an internal perimeter road adjacent to Verdun Street which is set behind landscaping reducing any visibility from Verdun Street.

The perimeter road continues along the eastern boundary adjacent to QE11 and in this location has no impact on the surrounding residential area.

In any new or redevelopment of carparking areas adjacent to Monash Avenue shade trees are to be provided at a rate of one tree for every four car bays in the car parking areas.

Appendix 2 includes the overall landscaping concept for the site based on maintaining the indigenous landscape to enhance and create habitat for the local fauna and flora. This particularly applies to the boundary landscapes which have been used as a link in the flight path between Kings Park and Bold Park on the Karaki Biirdi Trail. The landscape of the hospital is of even more significance as the new development on the adjoining hospital site have eliminated a significant amount of tree canopy which were previously an important part of the trail. With respect to the landscapes contained within the site most of these are small and localized sites relating to the function of the adjoining hospital. The landscape will use local West Australian plants to economise on water use and minimise maintenance programs whilst providing amenity for the hospital staff, patients and visitors.

Appendix 2 also includes an assessment of the landscaping along Verdun Street and makes recommendations for its improvement to revitalize the landscape.

7.0 MODIFYING THE MASTERPLAN

As future developments are progressed from planning to construction they shall be consistent with the approved Masterplan. If consistent with the Masterplan Council could support the Development Application without the need to advertise such an application. Any application which is not consistent with the approved Masterplan could be refused, approved with conditions or at Councils' discretion may require advertising for public comment and a modification to the Masterplan but would be assessed on its merits by Council. When Council requires that the approved Masterplan must be modified it should follow the procedures included in Section 8.3 Procedures for Making or Amending a Local Planning Policy in TPS No. 2.

Occasionally HPH may submit an application for development which varies from the approved Masterplan. For example a building may be proposed within a Future Development Area but which has a building footprint which varies the indicative building footprints shown on Figure 6.

It is Council's intention that the modifications to the Masterplan shall require amendment to the Masterplan with the exception for a variation to an indicative building footprint within the Future Development areas when;

- The modified building footprint is contained within the Future Development area; and
- The area of the modified building footprint is equal to or less than the area of the footprint shown on Figure 6.

8.0 CONCLUSION

The adoption of the proposed Masterplan is consistent with the Special Use zoning of Hollywood Private Hospital and the provision in Schedule V of TPS No. 2 allowing the Council to approve a new Masterplan from time to time. Adoption of the Masterplan is also consistent with the Councils' requirement that a new Masterplan shall be prepared before any further building approvals are issued.

The Masterplan will allow all future development to be assessed taking the wider parameters of the site and locality into consideration. It gives all decision – making authorities, service agencies and the community secure knowledge of what to expect from the future expansion and redevelopment of the HPH campus.

Ramsey Health Care, the operators of HPH seek to continue to provide a high standard of facilities and services while responding to the growing demands of the community.

The Masterplan presents the short, medium and long term building program and shows that this can be achieved without having any significant adverse impact on the locality. In particular, it demonstrates that the site has sufficient area to allow for growth without overshadowing residents and neighbours. It also concludes that there will be little noticeable impact on local traffic.

Appendix 1

Strategic Planning Context

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Strategic Planning Context

State Planning Policy

HPH is located immediately adjacent to the QEII Medical Centre that is currently being significantly expanded which is consistent with being identified as a “Specialised Centre”. The planning for QE II MC has included strategic planning direction for HPH.

Specialised Centres are identified and addressed in State Planning Policy 4.2 Activity Centres for Perth and Peel.

The Western Australian State Government, specifically the Department of Health, has investigated the future requirements of the Queen Elizabeth II Medical Centre (QEII MC) and the possible redevelopment of the site. This has involved the preparation of documents including the State Government Health Reform (Reid Report), the QEII MC Access and Structure Plan and the QEII MC Masterplan. These documents have outlined among other things, the requirement for the construction of a new multi - deck car park (recently completed) on Winthrop Avenue, a new children’s hospital (under construction), a new women’s hospital and a new central energy plant on the western side of the QEII MC site.

In November 2005, the Department of Housing and Works on behalf of the Department of Health (DoH) initiated an access and structure planning process to provide for the future development requirements of the QEII MC.

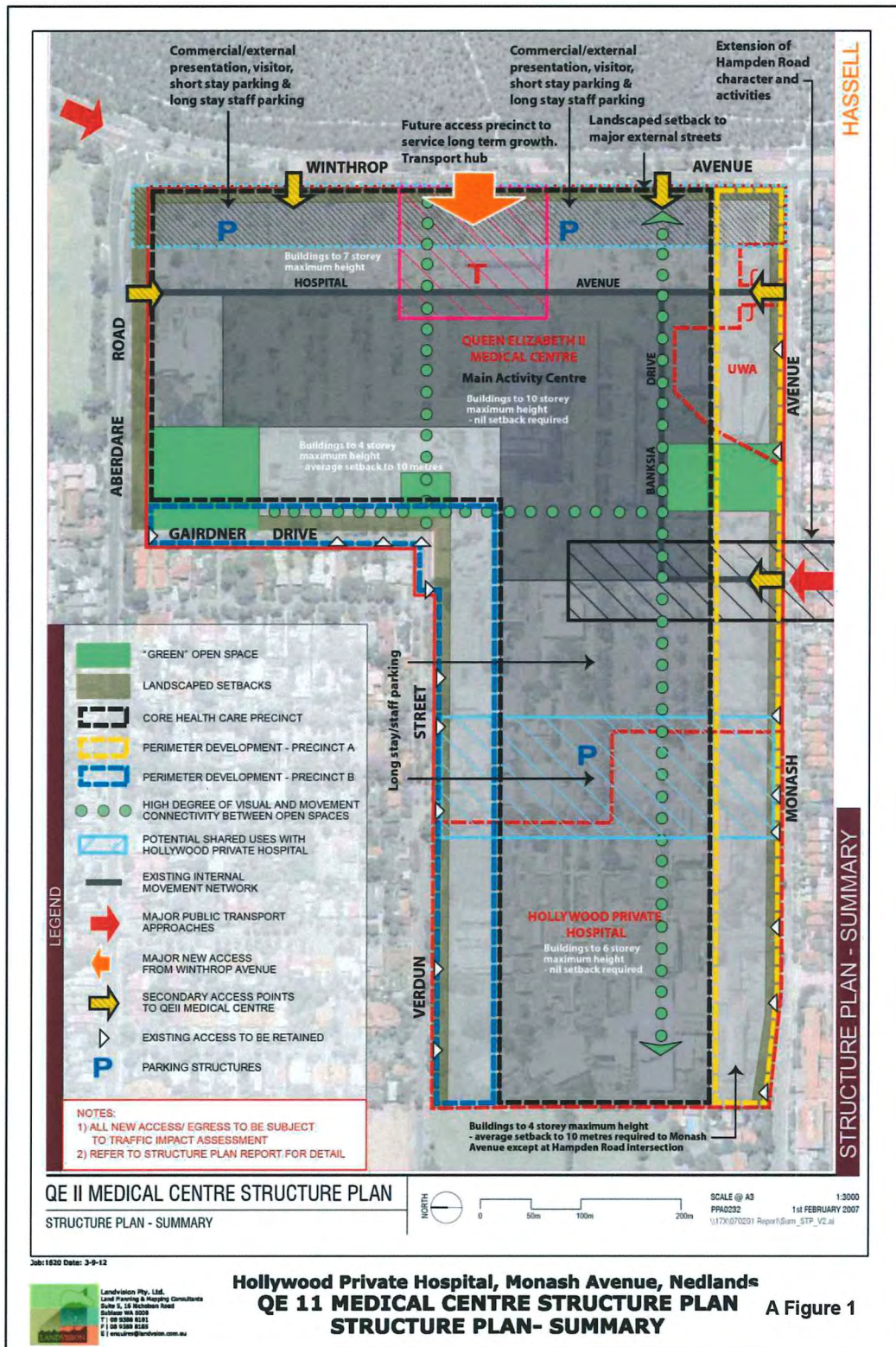
The need for forward and strategic planning had arisen through work in two main areas:

1. Implementation of health reform initiatives identified in the “Reid Report”. Redevelopment of the site is proposed that will accommodate the best of health care delivery services for Western Australians into the future; and
2. Agreement with the Western Australian Planning Commission (WAPC) that a structure plan incorporating a parking management and access plan would be prepared for the QEII MC that could be used to determine the implications of future development.

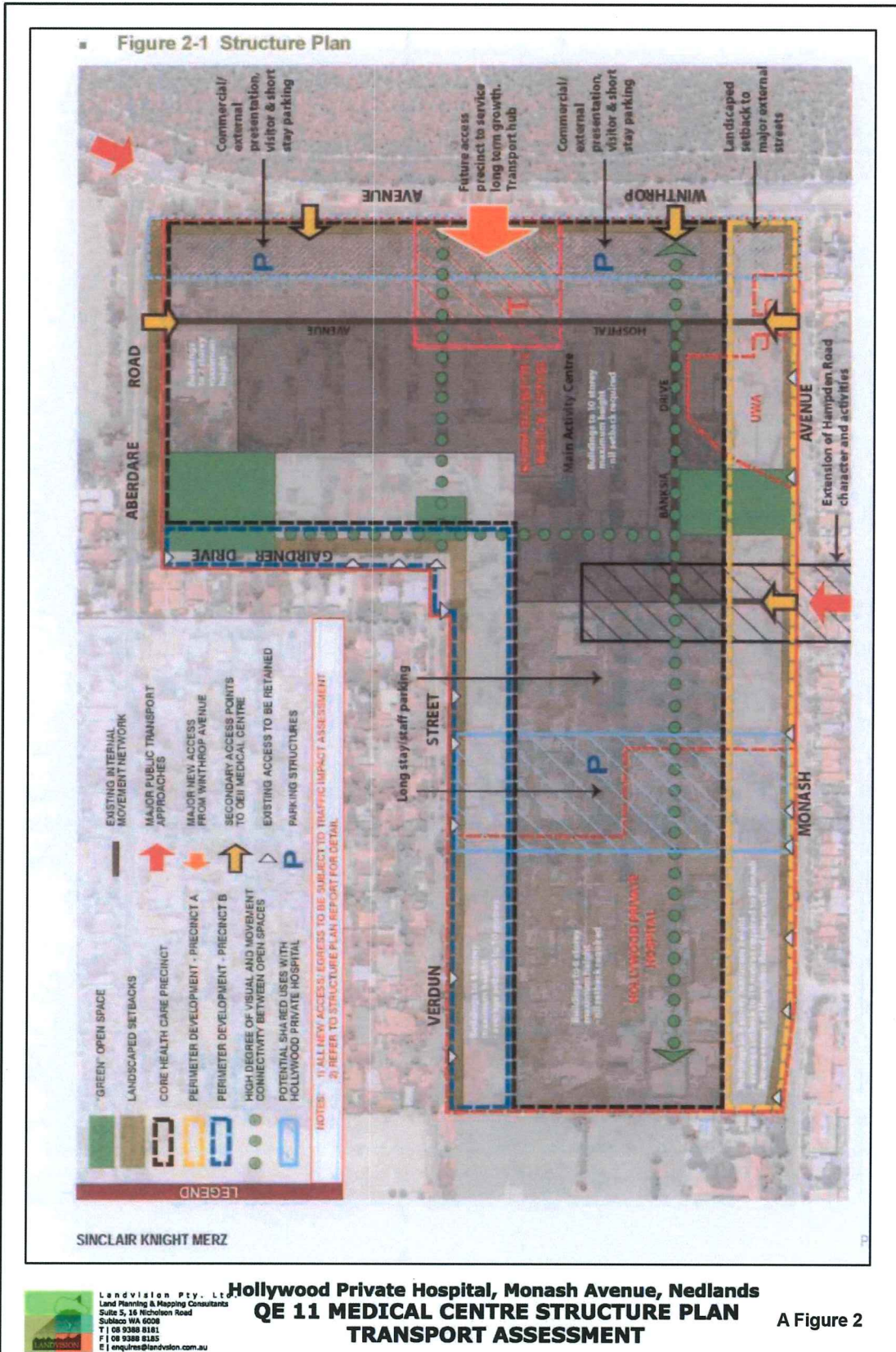
Structure plans have been prepared for QEII MC which also make recommendations for HPH (see Figures 6 & 7). A structure plan was therefore required that would test and provide for the new scale of development and associated infrastructure requirements (including traffic and transport), and for the detailed planning of a high quality built environment in the context of surrounding residential, recreation and commercial land uses.

Included in the health reform proposals was the possibility of King Edward Memorial Hospital (KEMH) being relocated from its current site in Subiaco to the QEII MC. Not included in the proposals but remaining as a possibility as a result of further detailed clinical services planning, was the collocation of Princess Margaret Hospital (PMH) with KEMH.

Hollywood Private Hospital Masterplan 2014



Hollywood Private Hospital Masterplan 2014



Hollywood Private Hospital Masterplan 2014

While the core focus of the study area is the QEIIIMC, the very close proximity of Hollywood Private Hospital is such that analysis and general structure planning has also addressed that site as part of the secondary study area. All access and structure planning has taken place in the context of proximity to the University of Western Australia (UWA) and the surrounding area.

The relationships and potential relationships between QEIIIMC, HPH and UWA offer much potential, and planning cannot ignore them. Additionally, all three sites are major employers and generators of staff, visitor and service traffic that combine to have a major impact on the locality. The regional planning implications of the QEIIIMC as an "Activity Centre" offer the opportunity for a review of the broader planning context between the Department of Planning and the affected local authorities.

Planning control over development on the QEIIIMC site rests with the WAPC because it is development by a public authority and is on land reserved under the Metropolitan Region Scheme. In comparison, HPH is a privately owned development on zoned land and hence falls within the planning jurisdiction of the City of Nedlands. For this reason, the elements of this Structure Plan that relate to HPH can be recommendations only which have been considered in the formulation for the Masterplan for HPH.

As discussed elsewhere in the Amendment report Figures 1 and 7 are extracts from these plans and (ie. Queen Elizabeth Medical Centre Access and Structure Plan, prepared for the Department of Health, February 2007) and show key features reflected in the Masterplan for HPH including:

- maximum building heights with 4 storeys along Monash Avenue, 6 storeys in the centre of the site and 4 storeys along Verdun Street although HPH proposes only 2 storeys along Verdun Street to minimise visual impacts on residential areas opposite HPH;
- access from Verdun Street, which is restricted to day time use on week days during working hours only to minimise impacts on the nearby residents;
- areas with potential to share uses, such as parking in an area where QEII and HPH share a common boundary;
- a common axis parallel to Monash Avenue with a high degree of visual and movement connectivity between open spaces; and
- maintaining the existing vehicle and pedestrian access points to HPH along Monash Avenue and Verdun Street.



element.

Our Ref: 717-356
Your Ref: DA18/29816
JDAP Ref: DAP 18/01457

10 August 2018

Chief Executive Officer
City of Nedlands
PO Box 9
Nedlands 6009

Attention: Kate Bainbridge, Senior Statutory Planning Officer

Dear Kate,

**LOT 564 (NO. 101) MONASH AVENUE, NEDLANDS – DEVELOPMENT ASSESSMENT PANEL
DEVELOPMENT APPLICATION (DAP 18/01457) – HOLLYWOOD CONSULTING CENTRE
(HOLLYWOOD PRIVATE HOSPITAL) – ADDITIONAL INFORMATION**

Further to our recent discussions regarding the provision of car parking outlined in the above mentioned development application, we have subsequently undertaken an audit of all existing parking bays on site and believe we are below the maximum number of 1,800 car parking bays outlined in the Master Plan for the site, even with the additional 254 car parking bays proposed.

Please find attached:

- A letter from Cardno dated 8 August 2018 outlining the parking supply, parking management system and travel behaviour initiatives;
- A Site Plan outlining where the car parking bays are; and
- The 2014 Ramsay Travel Smart Strategy.

As can be seen in the letter and plans, the number of staff and visitor car parking bays is actually significantly lower than the previously thought parking supply of 1,684 bays with now only **1,520** staff and visitor parking bays currently existing.

With the 254 additional car parking proposed by the current application combined with the number of existing bays, the total number of bays that will exist on site from completion of the development is **1,784 bays**, which is below the 1,800 maximum set by the Master Plan.

This notwithstanding, it should still be noted that Ramsay has embraced travel smart initiatives advocated by the Department of Transport and is working towards reducing the number of vehicle trips to the Hospital, particularly for the Hospital administration staff who generally work core 9am to 5pm business hours. Given the hospital function, the parking priority is to provide for patient and visitor parking, doctors parking and parking for essential shift workers such as nurses (where there is a duty of care to ensure a safe travel environment after core business hours). The key focus for travel smart initiatives is therefore aimed at reducing the vehicle movements for administration staff working standard business hours.

Whilst such initiatives include the introduction of paid parking (at a cost of some \$2 million) as outlined in the Cardno letter, such initiatives are undertaken on a voluntary basis and should not form any conditions of approval, especially given the site is compliant with the parking outlined by the Master Plan.

CONSULTING CENTRE (HOLLYWOOD PRIVATE HOSPITAL) – ADDITIONAL INFORMATION

With regard to the calculation of the car parking bays, it is important to note that the bays have been calculated in accordance with Department of Transport requirements which exclude bays such as delivery bays/loading bays, Ambulance bays and ACROD parking. It should also be noted that there are some informal temporary 'tandem' bays central to the Verdun Street boundary which are being used as a result of current construction vehicles being on site that will not be used following completion of the subject Consulting Centre development. There are also two bays on the western side of the multi deck car parking which are currently being used for motor cycle bays to improve the visibility around the corner, but these two bays have been included as car bays in the 1,520 parking bay count.

Based on the above and the attached information, we believe that this adequately addresses the issue in relation to the maximum number of car parking bays provided on site.

Should you have any queries in relation to the above, or the remainder of the application, please do not hesitate to contact the undersigned on 9289 8300.

Yours sincerely
element



David Read
Director

cc. Mr Michael Daymond – Planning Manager (Land Use Planning)
Department of Planning, Lands and Heritage
140 William Street
PERTH WA 6000



Our Ref CW1004000:jm
Contact Jacob Martin

8 August 2018

David Read
Element Advisory Pty Ltd
Level 18, 191 St Georges Terrace
Perth WA 6005

Attention: David Read, Director

Cardno (WA) Pty Ltd
ABN 77 009 119 000

11 Harvest Terrace
West Perth WA 6005
PO Box 447
West Perth WA 6872
Australia
Phone +61 8 9273 3888
Fax +61 8 9486 8664
Email wa@cardno.com.au

www.cardno.com

Dear David

Proposed Hollywood Consulting Centre Parking Addendum to Transport Impact Assessment

The following letter describes a range of factors that will contribute towards the function of parking at Hollywood Private Hospital (HPH), and clarifies the proposed car parking supply associated with the Development Application (DA).

Introduction

This letter forms an addendum to the Transport Impact Assessment (TIA) submitted in support of the DA, consistent with the requirements of the *WAPC Transport Impact Assessment Guidelines: Volume 4*.

The DA proposal consists of a medical consulting centre with 35 consulting rooms, radiology and radiology oncology centres, and a component reserved for future hospital services. This proposal represents part of a staged resolution of the *Hollywood Hospital Masterplan* (July 2013), which is the guiding document for future growth and development of the site.

Parking Supply Context

The Hollywood Private Hospital Masterplan (2013) policy document outlines that the maximum number of bays permitted on site is **1800** car parking bays.

The proposed development includes **254** bays on three levels of parking within the building envelope, the removal of **47** existing bays within the site, and an additional **57** bays of at-grade parking. Overall, the net parking increase is **264** bays, plus 6 ACROD bays.

To determine the existing parking supply as part of the TIA, Cardno referenced a previous parking supply audit undertaken for planning purposes, which showed a total on-site supply of **1,684** bays. However, a recent audit of parking spaces across the campus showed that some of these spaces, due to internal reconfiguration and natural attrition, have been lost since that time.

In addition, on advice from the Department of Transport, several categories of parking can be excised from consideration under the parking cap, including ACROD, pick-up/drop-off, ambulance and loading bays. A total of **83** of these ancillary/specialty bays lie outside of the parking cap.

The result is a revised parking supply of **1,520** bays within the existing HPH campus. The addition of **264** staff/visitor bays proposed by the DA brings the total supply up to **1,784** bays. The overall development proposal therefore remains within the existing parking cap of **1,800** bays.

Parking Management System

HPH has committed to implement a comprehensive paid parking system to assist in the efficient management of on-site staff and visitor parking. This system will assist in optimising the use of existing car parking, improving parking compliance and effectively segregating the various user groups as required for operational purposes. The system will come into effect from January 1st, 2019.

The paid parking management system will be integrated into the existing employee parking permit system, so that the total number of employees parking on-site can be maintained at a sustainable level.

The system will consist of a number of discrete parking sections with entry controlled by high-throughput boom gates and permit recognition (as appropriate). Where parking areas are located close to entry points, pay and display parking is proposed. This eliminates any potential for queuing issues affecting the function of Monash Avenue.

The introduction of paid staff parking will assist to induce mode shift to sustainable transport modes, in particular cycling and public transport.

Travel Behaviour Change Initiatives

Any shift away from driving modes will be supported through HPH travel behaviour change initiatives, described briefly as follows:

Infrastructure:

- > Improved wayfinding and connectivity to the existing internal pedestrian link; allowing more convenient staff access to the high-capacity bus service which runs along Hospital Avenue. However, it should be acknowledged that the majority of the route lies within the QEIIIMC campus, and that usage of this link is expected to remain low until a better pedestrian environment is provided.
- > Upgraded end-of-trip facilities, including lockers, change rooms, showers and bicycle parking. This will be added to extensive existing facilities, comprising over 500 lockers, 25 showers, 50 u-rail bicycle parking spaces, 2 secure bike cages, hairdryers, irons and laundry service (for theatre staff).

Incentives

- > HPH runs an effective program which provides direct financial incentives for employees that use non-driving modes, in the order of \$2 per trip (\$4 per day). In the six months to July 1, 2018 this program was used by almost 300 employees, facilitating over 31,000 trips by sustainable transport.
- > The introduction of paid parking for employees creates a financial *disincentive* for driving. When combined with the financial incentives program, this creates a strong motivation to seek alternative transport options.

Information

- > HPH provides information services to employees, through direct and indirect engagement, to ensure that employees understand their travel options.

The key components of HPH's behaviour change initiatives are described in the Draft *Hollywood Private Hospital Travel Plan 2014-19* (July 2014).

Summary and Conclusion

The proposed Hollywood Consulting Centre will ultimately increase the travel requirements for HPH staff and visitors. The impact of this on the road network is generally limited to peak period staff travel, which will be mitigated by existing and future travel behaviour change initiatives.

In summary the proposed parking solution consists of the following components:

- > The construction of on-site parking as part of this stage of development necessary to support the proposed use. Total supply will be 1,784 bays (plus a number of ACROD, service/delivery, loading and pick-up/drop-off bays);
- > This overall supply will be regulated through use of the parking management system to ensure that parking is equitably and efficiently provided to staff and visitor groups as needed; and
- > Travel behaviour change initiatives will work alongside parking management to support mode shift to sustainable alternatives.

We believe this approach is consistent with the parking cap, and manages on-site car parking in a manner that minimises the impact of the HPH campus on the surrounding road network.

Yours sincerely



Jacob Martin
Team Leader, Transport Planning

for Cardno

Direct Line +61 8 9273 3888

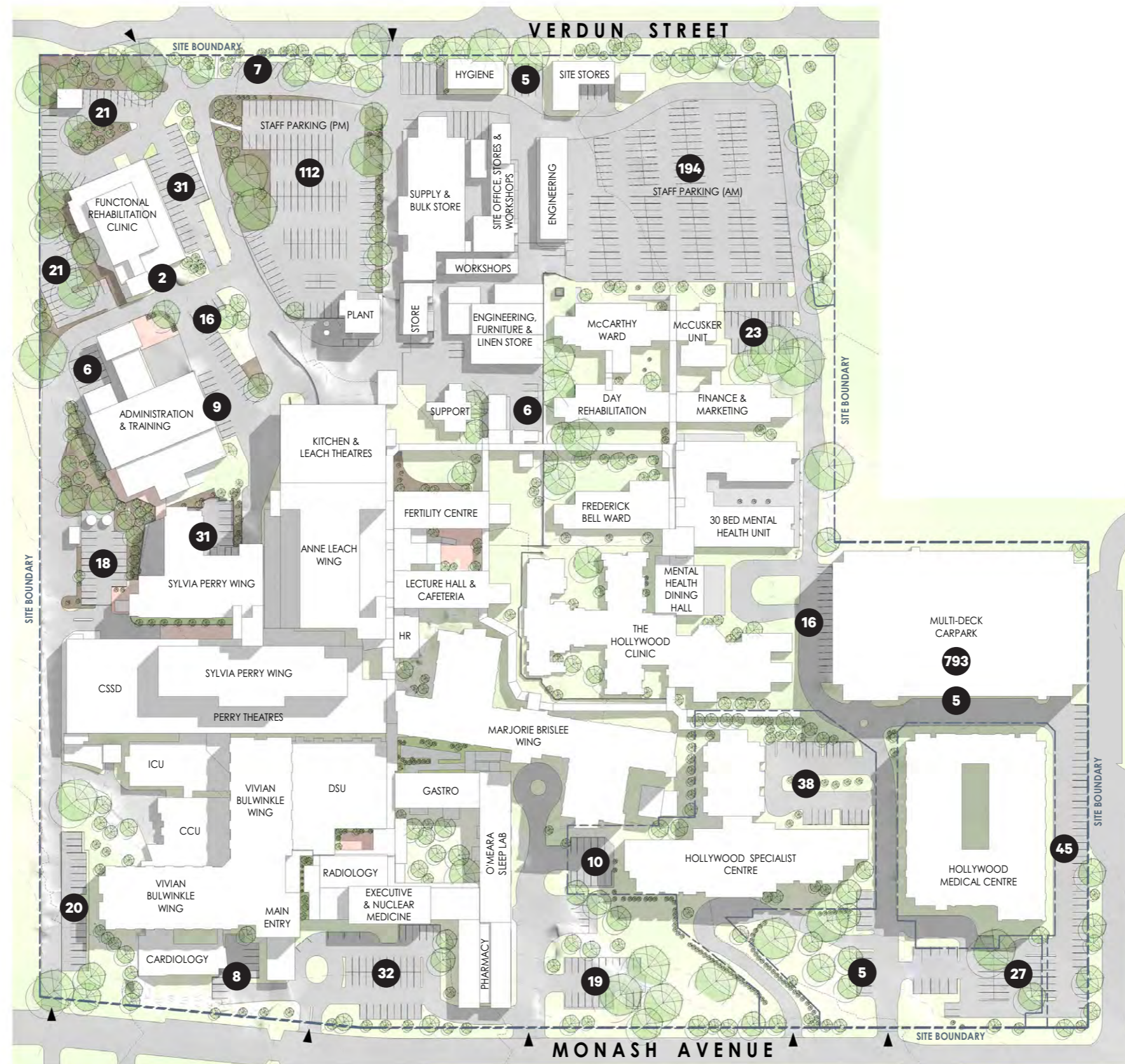
Email: jacob.martin@cardno.com.au

Cc: Department of Transport, City of Nedlands, Hollywood Private Hospital

LEGEND

10 Existing Parking Count

Total Existing Parking Bays - 1520



Existing Parking Plan

Hollywood Hospital, Nedlands

Hollywood Private Hospital

2014-19 Travel Plan

CEP02232



Prepared for
Ramsay Health Care

June 2014

Contact Information

Cardno WA Pty Ltd
Trading as **Cardno**
ABN 77 009 119 000

11 Harvest Terrace, West Perth WA 6005

Telephone: 08 9273 3888
Facsimile: 08 9486 8664
International: +61 8 9273 3888

wa@cardno.com
www.cardno.com

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Version	Reason for Issue	Approved for Release By	Approved (Signature)	Approved Release Date
1	Initial release to client	RJC		09/06/2014

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1 Background

1.1 Background

The first Hollywood Private Hospital (HPH) Green Transport Plan was developed in 2003/2004 as a partnership between employees of HPH, the City of Nedlands TravelSmart Officer and the then Department of Environment's TravelSmart Workplace Coordinator.

The Plan contained 6 green transport strategies, with a series of key performance indicators framed around measureable targets. The performance indicators were used as a basis to measure the success of the Plan.

It is important to review Green Transport Plans every 5 to 10 years to review the effectiveness of measures implemented and allow the updating of strategies to meet the evolving needs of workplaces and the transport environment.

Accordingly, a review of this document was commenced in 2011 but was put on hold due to the impending major redevelopment works and preparation of a Master Plan for the HPH campus.

Following completion of the Master Plan in 2013, a travel survey of HPH staff was undertaken to inform the preparation of a revised Travel Plan (this document).

1.2 Site Travel Context

Ramsay Health Care Facilities is a global hospital group operating 151 hospitals and day surgeries across the world, including Hollywood Private Hospital. As the landlord of the site, Ramsay Health Care has the ability to develop and implement Travel Demand Management strategies. The landlord controls key areas such as:

- > Car parking supply and location
- > End of trip facilities

However, there are also several key areas which are not controlled by the Ramsay Health Care and therefore rely on buy-in and cooperation from third parties to deliver meaningful Travel Demand Management outcomes. These include:

- > Public transport service provision (Public Transport Authority)
- > External walking and cycling connections (City of Nedlands)
- > Internal facilities in some buildings (tenants / leaseholders)

1.3 Why a Travel Plan?

Hospitals or health campuses are major generators of traffic. Traffic congestion with growing car parking demand is a common problem for hospitals, affecting their accessibility and efficiency. The preparation, adoption and implementation of a Travel Plan by HPH is primarily being motivated by the issue of insufficient parking supply to meet unconstrained parking demand, particularly by staff.

Workplaces need to ensure that staff have appropriate incentives to choose alternative transport modes and by working to improve these alternatives, organisations can achieve significant success.

What is the purpose of a Travel Plan?

- > Improve access/address parking problems (e.g. free up car bays for visitors)
- > Reduce organisation's carbon footprint
- > Promote employee health and wellbeing
- > Engage whole organisation in corporate sustainability initiative
- > Show leadership in community/industry sector

Benefits and cost savings from implementing a Travel Plan include:

- > Efficient allocation of parking
- > Reducing the traffic congestion that would otherwise result from unconstrained parking supply
- > Managing the impacts of more intense development on the site by prioritising more efficient and environmental friendly transport modes
- > Redirecting space and resources from parking on site to a focus on core activities (i.e. health care, research and education)
- > Providing equitable access to the site for non-car owners and non-drivers
- > Happier and healthier staff, reducing turnover and lost productivity (e.g. sick days)
- > Creation of a 'greener' image for the site

1.4 Policy Context

1.4.1 National Policies

1.4.1.1 *National Urban Policy*

The National Urban Policy Our Cities, Our Future (2011) articulates the Australian Government's vision and objectives for cities. One of its key objectives is to improve transport options and reduce our dependence on private motor vehicles. A further objective is to improve public health outcomes through better built environments.

1.4.1.2 *National Cycling Strategy*

In 2010 the Australian Bicycle Council issued its third five-year strategy, National Cycling Strategy 2011–2016, which sets a target of doubling the number of people regularly riding bicycles over the five-year term. Ten thousand households were surveyed across the nation to establish the 2011 benchmark.

1.4.1.3 *National Partnership Agreement on Preventive Health*

The National Partnership Agreement established obesity-related targets including a 15 per cent increase in the proportion of children and adults meeting national guidelines for physical activity by 2018; and for the proportion of children and adults at a healthy weight to return to baseline level by 2018.

Through the National Partnership Agreement on Preventive Health the Australian Government is providing \$71.8 million over five years from 2009–10 under the Healthy Communities Initiative to support local governments to deliver community-based physical activity and healthy eating programs and to develop a range of local policies that support healthy lifestyle behaviours.

The Healthy Communities initiative also provides National Program Grants to six not-for-profit organisations to expand healthy lifestyle programs across Australia. Two of these programs – AustCycle (Cycling Australia) and Heart Foundation Walking (National Heart Foundation of Australia) – promote cycling and walking respectively. A small allocation has also been made to travel behaviour change programs through the states and territories.

1.4.1.4 *National Disability Strategy 2010–2020*

The National Disability Strategy 2010–2020 is signed by all state and territory governments, the Australian Local Government Association and the Australian Federal Government. It includes an outcome for inclusive and accessible communities: to ensure that people with disability live in accessible and well-designed communities with opportunity for full inclusion in social, economic, sporting and cultural life. It includes a policy direction for public, private and community transport systems that are accessible for the whole community.

It states that: The ability to move around the community underpins all aspects of life for people with disability ... People with disability are often still unable to make use of footpaths, cycle paths and local roads as many

of these have not been designed to be fully accessible. A continuous accessible path of travel for people with disability needs to connect public transport nodes with local services and accessible housing.

1.4.2 State Policies

1.4.2.1 Directions 2031

Directions 2031 Spatial Framework for Perth and Peel defines spatially how Perth should grow and identifies the structural changes to transport land use required to support that growth. Directions 2031 includes strategies to encourage a shift towards active transport, particularly as portions of the transport network become more congested.

Directions 2031 supports the promotion of sustainable transport options including the planning and design of activity centres around transit-oriented development principles to promote public transport, walking and cycling as alternatives to private car use.

As a key component of the QEII-UWA Strategic Centre within the plan, HPH has a critical role to play in the move away from dependence upon single occupant vehicle commuting.

1.4.2.2 Western Australian Bicycle Network (WABN) Plan 2014-2031

The WABN Plan is the primary cycling strategy in Western Australia and guides the implementation of improved cycling networks to contribute towards an integrated transport network.

The plan aims to double the current cycling mode share and the plan details that there has been a huge growth in cycling over the past 10 years. The plan also stresses the importance of providing a coordinated approach to implementing a high quality and connected bicycle network. Key principles of the plan include providing key trunk routes between activity centres, an end of trip facility strategy, connecting stations and providing a high quality cycle network within a 15km radius of the Perth CBD.

1.4.2.3 Public Transport for Perth in 2031

Public Transport for Perth 2031 is the primary strategy for the improvement of the public transport in Perth over the next 18 years. The strategy recognises that good cities need effective public transport to function and produce liveable, inclusive communities. Growth in the city, both now and in the future, is putting pressure on the traditional car-based transport network which is unable to cope with the need to provide road and parking space in an increasingly built-out urban area.

The Plan sets a target of increasing peak period public transport mode share from round 12.5% to 20% by 2031, with mode share for journeys to Perth CBD to increase from 47% to 70%. Achieving these targets requires the provision of much improved public transport services and thus a comprehensive improvement plan is set out in the strategy. Key projects for HPH include:

1. Light rail from Perth CBD (and Mirrabooka/Victoria Park) adjacent to HPH (before 2020)
2. Bus Rapid Transit along Mounts Bay Road (before 2020)
3. Light rail from Stirling/Glendalough to Subiaco and QEII (before 2031)
4. Bus Rapid Transit from QEII/IMC to Shenton Park Train Station (before 2031)

It is noted that this document is now somewhat out of date, with changes in State Government priorities and funding allocations, and therefore it is unlikely that these projects will be implemented as per the stated timeframes.

1.5 Development Context

HPH has grown significantly since its establishment in 1947 and a further expansion programme is currently underway. The current work, which commenced in January 2014 and is anticipated to be completed in late 2015, includes:

1. The construction of a new wing which incorporates six more operating theatres, two new 30 bed wards and a new kitchen.
2. The expansion of the multistorey car park to include another level.

3. Approximately 100 secure undercover bicycle parking spaces – located within 3 'cage' facilities to be spread around the site. These will be intended for staff use.
4. An additional 50 u-rail type bicycle parking spaces to be located near the entrances of each building to ensure high user convenience and passive surveillance. These will be intended for visitors, deliveries and other short term users who do not require secure parking.
5. An increase in the number of lockers to over 600
6. An additional 5-10 showers
7. Investigation of the provision of a dry cleaning or laundry service over the weekend, so that staff that cycle to/from work do not need to transport their clothes to/from work.

2 Site Access Review

2.1 Public Transport

2.1.1 Existing

The current bus services available to staff at HPH include the following routes:

- > Route 24 (Claremont Station to East Perth);
- > Route 25 (Claremont Station to East Perth);
- > Route 97 (UWA to Subiaco via QEII Medical Centre) with train connection at Subiaco Train Station;
- > Route 98/99 (Circle Routes);
- > Route 103 (East Perth to Fremantle);
- > Route 750 (Morley to QEII Medical Centre via Beaufort Street/Perth City/UWA).

The location of these bus routes relative to HPH are shown in Figure 2-1.

Figure 2-1 Excerpt from Transperth Network Map



Note: This is the latest Transperth Network Map, however it is slightly out of date. Routes 78 and 79 have been replaced by Route 750.

The level of service provided by each of these bus routes is highly variable and this is shown in Figures 2-2 and 2-3.

Figure 2-2 Bus arrival frequency at HPH by origin

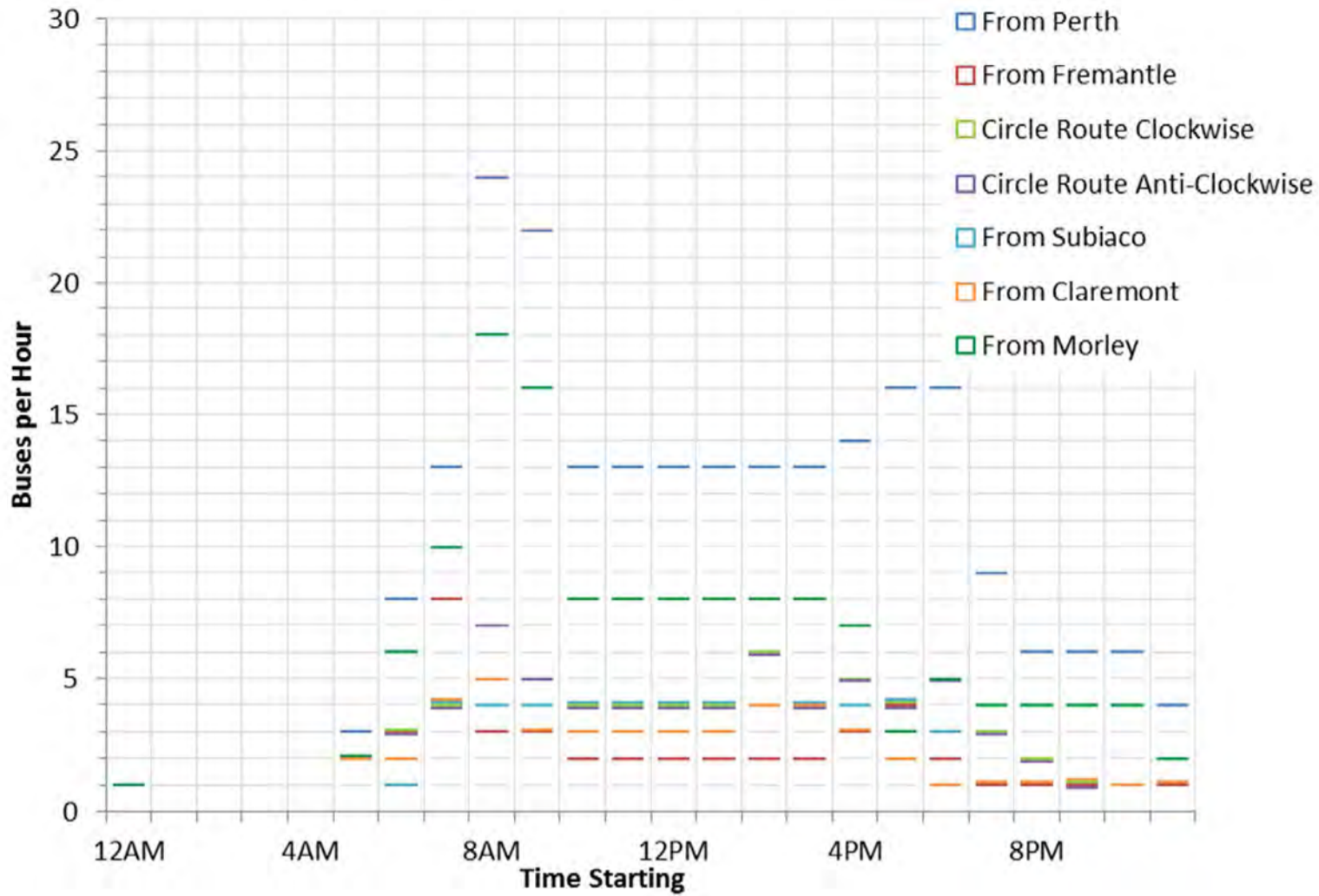
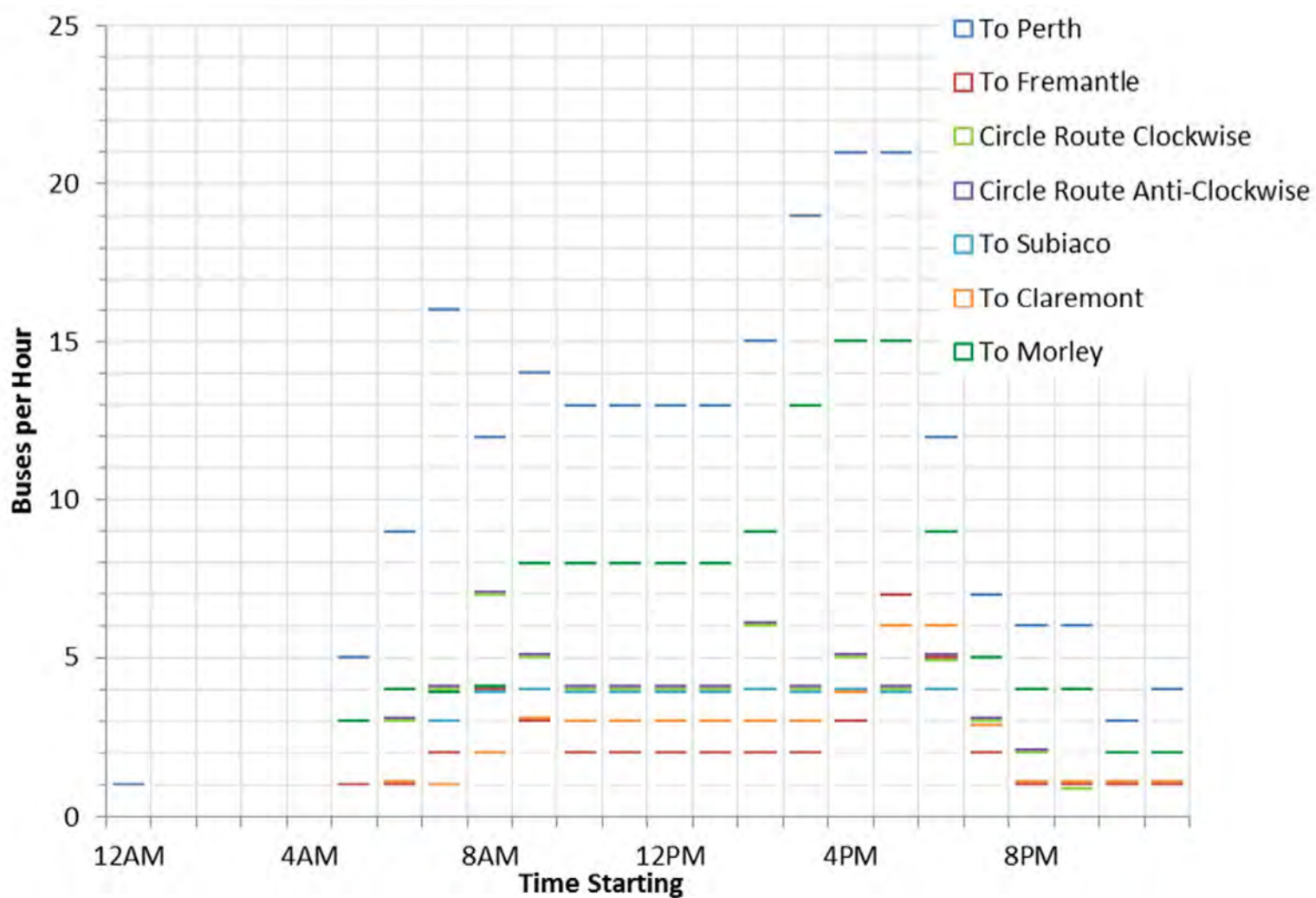


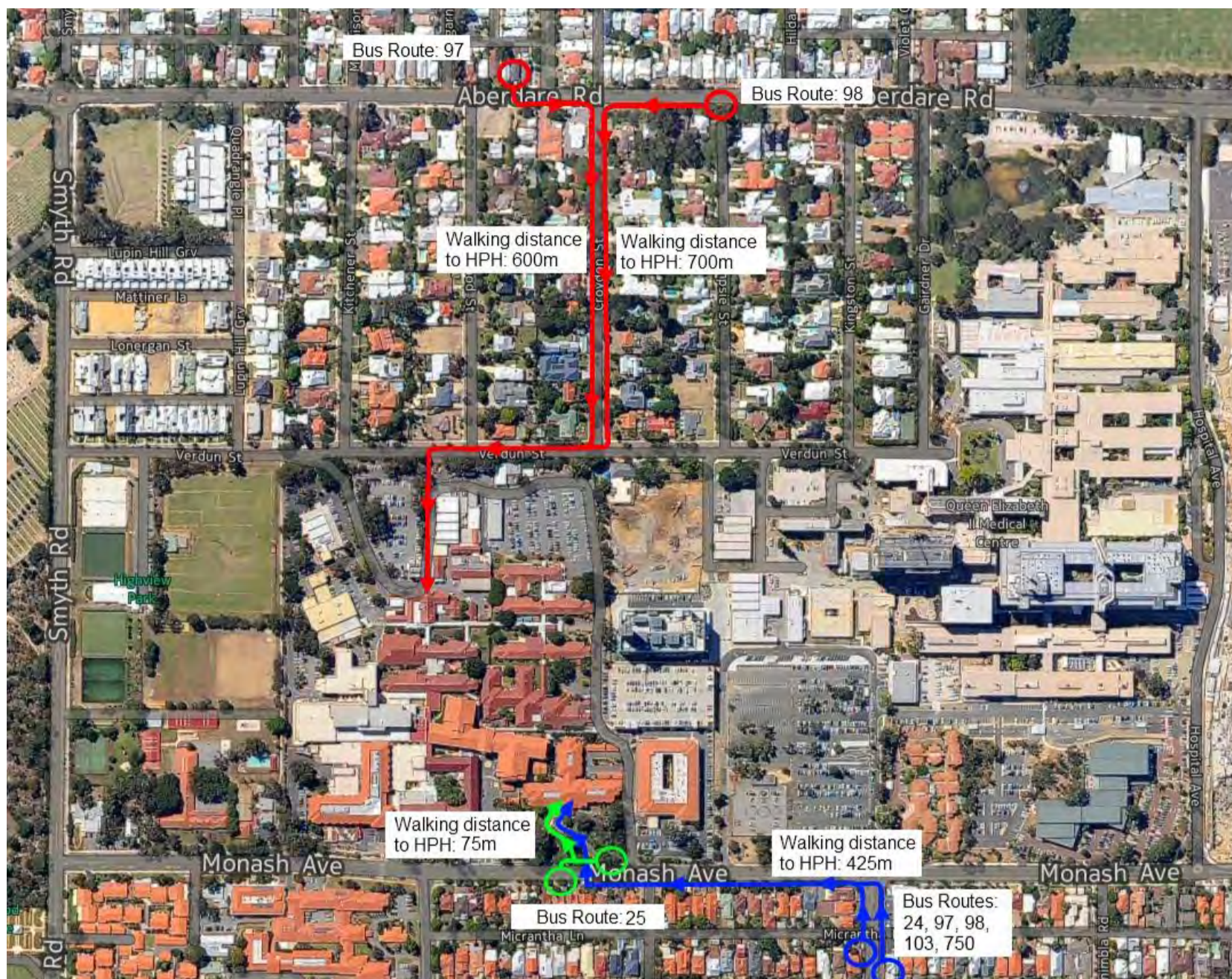
Figure 2-3 Bus departure frequency at HPH by destination



Bus services in the vicinity of HPH are centred on QEII Medical Centre and the main interchange on Hospital Avenue. This interchange is located an approximately 15 minute walk from HPH; however there are bus stops located closer to HPH for most of these services which would reduce the walking time for HPH staff.

Figure 2-4 illustrates the location of the nearest bus stops for each bus route serving HPH.

Figure 2-4 Bus stop locations and walking distances



As seen above, the most convenient bus stops for HPH staff are the Route 25 stops on Monash Avenue near the front entrance of HPH which are located on 75m away from the main building entrance. Unfortunately these stops only serve Route 25 which is an infrequent, ‘catchment’ style service that is unattractive to potential commuters. Accordingly, the most used stops are located on Hampton Road, approximately 425m away from the main building entrance. From these stops, HPH commuters are able to access the frequent routes, 97 (to Subiaco/UWA), 98/99 (Circle Routes), 103 (Perth CBD/Claremont/Fremantle) and 750 (QEII/Perth CBD/Morley).

It is recognised that for many staff and visitors to HPH, it is not the public transport in the immediate vicinity of the site which is an obstacle to travel but often it is the ‘first leg’ of the journey – i.e. getting from home to the bus stop or train station. State Government initiatives such as providing over 3,000 additional car parking bays at train stations, and improving feeder bus services to the rail network will assist in improving accessibility over time, complementing the reasonable quality links between HPH and the rail network.

2.1.2 Future

The *Draft Public Transport for Perth 2031* plan was released by the Department of Transport in 2011, setting out the future investment in high quality public transport services and infrastructure. Key relevant projects included in the draft plan include:

- > MAX Light Rail between Perth CBD, QEIIMC and UWA (by 2020)
- > Bus Rapid Transit along Mounts Bay Road between the Esplanade Busport and UWA (by 2020)
- > Light Rail between Glendalough, Subiaco and QEIIMC (by 2031)

It is noted that the State Government has subsequently altered the priorities and delivery timeframes for works in this plan and therefore it is unknown when or whether the projects will be delivered.

Provided that the light rail and bus rapid transit projects include public transport priority facilities (e.g. segregated lanes, signal priority etc.), they will result in a reduction in travel time between Perth CBD and QEIIMC (and therefore HPH). More importantly, the reliability of services will be significantly improved by reducing the potential for traffic delays to affect public transport services which is currently a major problem on Thomas Street and Mounts Bay Road.

The proposed light rail from QEIIMC to Subiaco and then Glendalough will provide an alternative north-south public transport connection to the west of Perth CBD which currently does not exist. Due to the likely travel time of this route, it is not expected to provide a significant reduction in travel time for journeys between HPH and the middle/outer northern suburbs; however it will significantly improve accessibility between HPH and suburbs such as Wembley, West Leederville and Osborne Park.

Even with the abovementioned improvements to public transport, HPH will continue to be less accessible than neighbouring QEIIMC and the location of access points to the public transport network should remain similar.

2.2 Cycling and Walking

2.2.1 Existing

Existing external cycling facilities are shown in Figure 2-5, an excerpt from the Department of Transport's cycling maps. It should be noted that a reasonable quality shared path also exists along the northern side of Monash Avenue, between Smyth Road and Winthrop Avenue, which is not shown on the map.

These external facilities are connected to HPH through a series of path and roadway access points along Monash Avenue and Verdun Street, providing convenient access for pedestrians and cyclists. Once inside the site, cyclists can utilise the low speed internal road network to reach the bicycle parking and pedestrians can utilise the internal path network.

Cycling can potentially be intimidating for less confident cyclists, particularly if they have not yet cycled the routes. However there are several quiet street approach routes to HPH which could be used by less confident cyclists, e.g. Williams Road, Kitchener Street and Burwood Street/Herbert Road. Additionally, there are several shared paths through Kings Park which provide convenient routes away from traffic to Perth CBD.

2.2.2 Future

The City of Nedlands has prepared a draft Bike Plan which will be put out for community consultation during 2014.

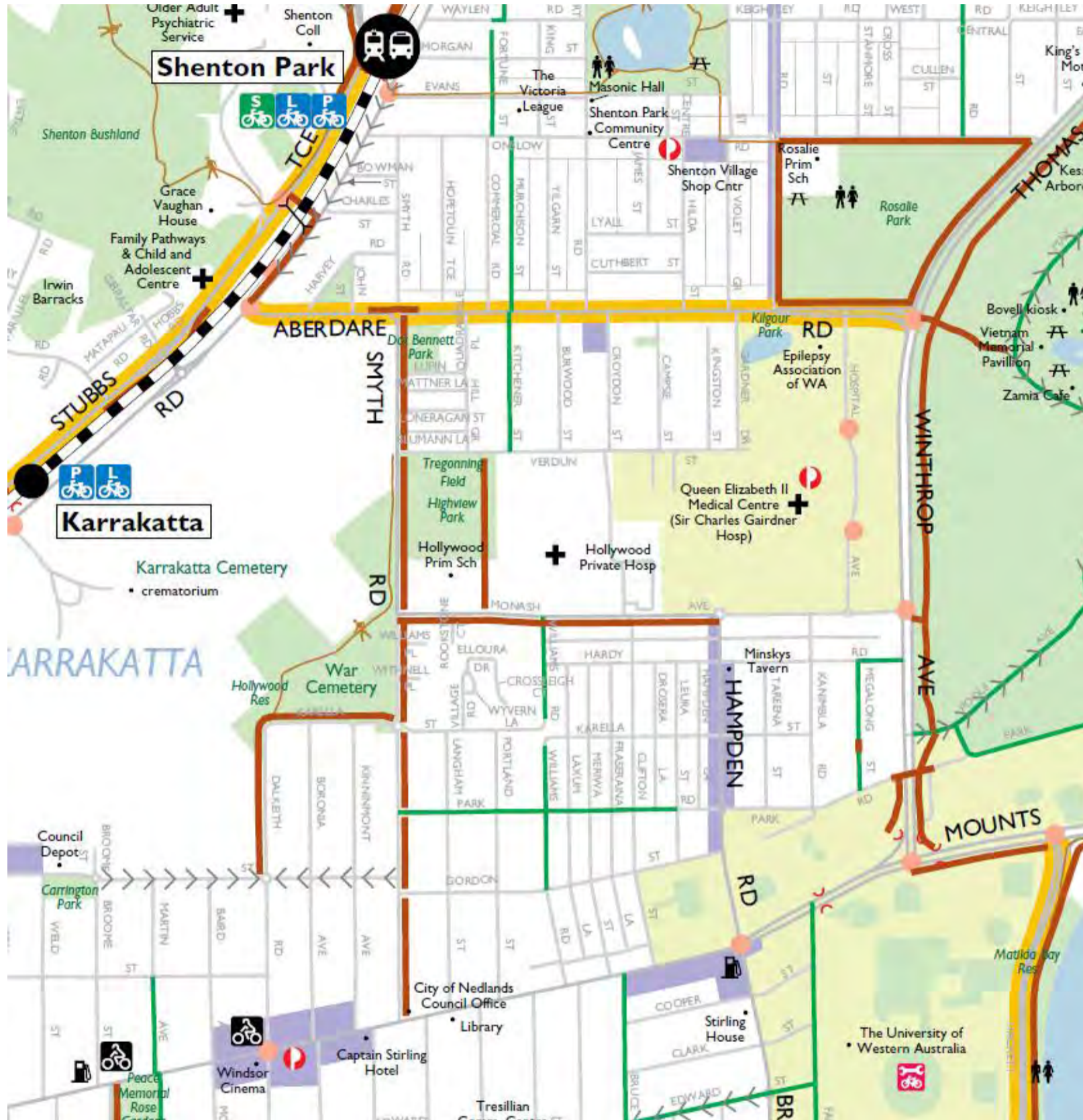
As it currently stands, the Bike Plan includes proposed shared paths along the following streets in the vicinity of HPH:

- > Carrington Street
- > Park Road







The City of Subiaco is currently preparing a Bike Plan and it is anticipated that it will be released for community consultation during 2014.

We recommend that HPH critically review both Bike Plans to ensure they meet the needs of HPH staff and provide formal responses through the community consultation process.

Figure 2-5 Excerpt from Department of Transport Cycling Map



Legend

-  High Quality Shared Path
-  Other Shared Path (Shared by Pedestrians & Cyclists)
-  Good Road Riding Environment
-  Gradient Arrow
-  Bicycle Lanes or Sealed Shoulder Either Side
-  Contra Flow Bike Lane

3 Review of 2004 Travel Plan

3.1 2004 Actions and Progress

A review of the 2004 Travel Plan was undertaken to understand which actions have been implemented, and the effectiveness these actions.

A summary of the implementation status of each action from the 2004 Travel Plan is presented in Table 3-1.

Table 3-1 2004 Travel Plan - Actions and Implementation Status

Action	Status
Promoting Travel Alternatives	
Regularly promote and run events awarding prizes for participation in the TravelSmart Program which acknowledges Executive Support (one prize to be given out each week)	Ongoing
Promote awareness of alternative transport facilities. Display board to be erected in Cafeteria including car pooling map, general information, cycling maps, bus/train	Completed but no longer maintained
Promote workplace participation in external events, such as Bike Week, Shed your Car Day.	Ongoing
Include information on alternative transport in employee induction packages and promotions.	Ongoing
Provide interested employees with individualised travel information through journey planning workshops and interviews.	Not implemented
Run awareness campaign through TravelSmart Workplace.	Ongoing
Green transport articles in internal newsletter. Information and links to green transport options on intranet.	Completed
Managers leading by example through Green Transport Plan presentation at Heads of Department meeting.	Not implemented
Set fuel reduction targets or employees km reduction targets. Obtain figures for fleet use and set targets for reductions. Log books have been developed. This will include those employees either walking, car pooling, cycling or using public transport. They will need to enter the kilometers over the six-month period for 60 trips. A one off prize of \$50.00 will be given to those who complete 50 trips and there will be a major prize draw at the end of the 6-month period.	Ongoing
Link GTP with Corporate Wellness Program - Prepare flyer including all aspects of Green Transport Plan.	Not implemented
Discounts for purchase of motorcycles/scooters.	Completed
Public Transport	
Provide bus and train information and timetables at work - Plastic holders to be obtained and placed in hospital foyer.	Completed
Car Pooling	
Provide a guaranteed ride home for car poolers. Provide taxi vouchers i.e. if unable to obtain a lift back home if driver has to work late.	Ongoing
Cycling and Walking	
Secure and additional bike racks and improve shower facilities and change rooms by reviewing all existing change facilities and bike parking areas to identify any deficiencies required.	Completed
Provide dedicated signage for cycle parking.	Completed
Provide free bike pool for commuting.	Completed

Action	Status
Maintain a bicycle tool kit.	Completed
Provide adult cycle training for those who request it i.e. training and upkeep.	This was trialed but did not attract any interest.
Form a BUG (Bicycles User Group).	Not implemented
Closer Motorcycles/Scooters parking bays, signposting; line marking required.	Completed
Laminate access guides and bike maps of the area and store in bike parking area.	Completed
Come to an agreement with a local bike retailer for cheaper servicing of employees bikes.	Completed – Bicycling Entrepreneur has agreed to a 10% discount
Workplace location and design	
Ensure workplace accessibility by alternative modes is considered in re-location or refurbishment.	Completed – All new building to have secure cycle facilities

The 2004 Travel Plan contained a number of Key Performance Indicators to measure the effectiveness of the plan. These are outlined in Table 3-2 below and compared with Travel Survey results from 2004, 2006 and 2013 to identify progress.

3.2 Key Performance Indicators

Table 3-2 Effectiveness of the 2003/2004 Travel Plan

Original Key Performance Indicator (2004 Plan)	Updated 'measurable' KPI	Travel Survey Results		
		2004	2006	2013
Number of employees who have changed from driver only trips	Percentage of driver only trips	78%	64%	72%
Number of employees who cycle	Percentage of employees who cycle	2%	3%	4%
Number of employees who walk	Percentage of employees who walk	1%	1%	4%
Number of employees who use public transport	Percentage of employees who use public transport	2%	4%	7%
The reduction in Greenhouse gases due to fewer driver only trips	Note: This is a repeat of the first KPI	-	-	-

It is noted from the table above that there has been a measurable increase in the percentage of employees who use public transport or cycling to get to work since 2004. However, the percentage of 'driver only' commuters has increased from the 2006 low of 64%. This may reflect many factors, including changing employee demographics, shift times and spreads, and the availability of parking.

4 2013 Travel Survey

4.1 Summary of Survey Respondents

The HPH Travel Survey was undertaken in November/December 2013 and provides valuable insight into the travel patterns of staff and visitors at the Hospital.

Over 400 responses were received to the survey from a wide range of respondent types, representing an approximately 25% response rate across all staff. The gender, age, role and organisation of survey respondents are outlined in Figures 4-1 and 4-2.

A separate report has been prepared which fully outlines the results of the travel survey [Cardno, 2013]. The following section provides a summary and analysis of some of the key indicators of staff travel preferences in order to obtain a picture of how best to affect further mode shift in the future.

Figure 4-1 Survey respondent gender and age

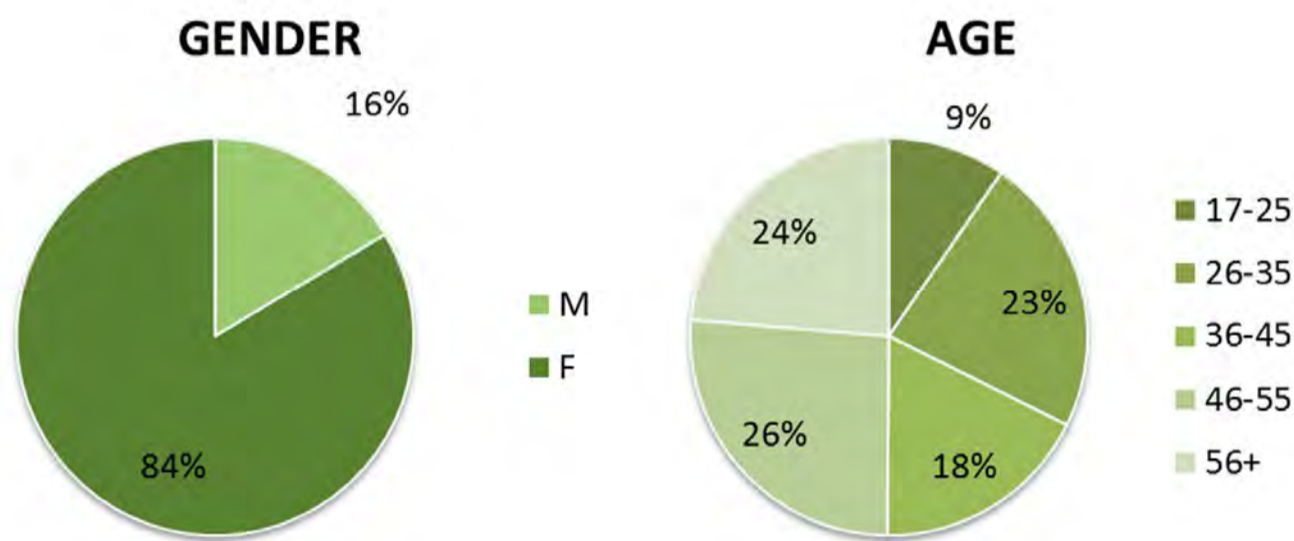
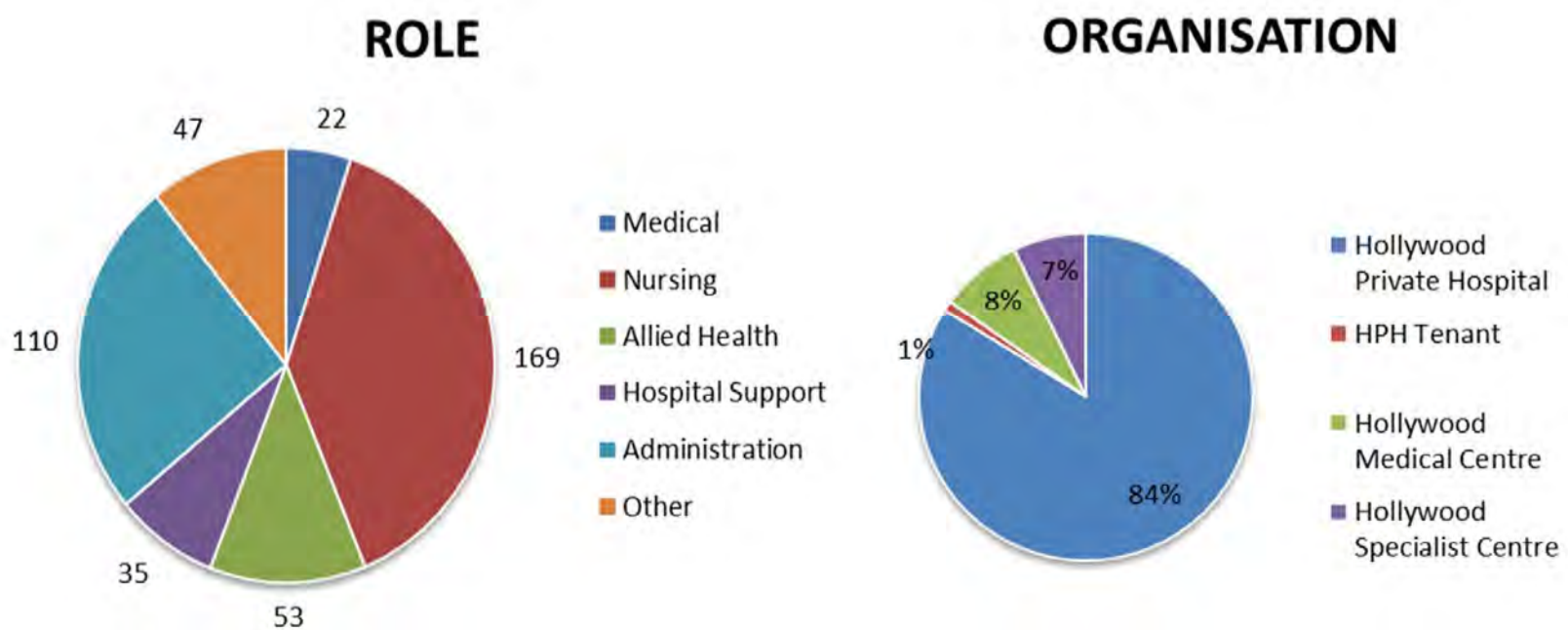


Figure 4-2 Survey respondent role and organisation

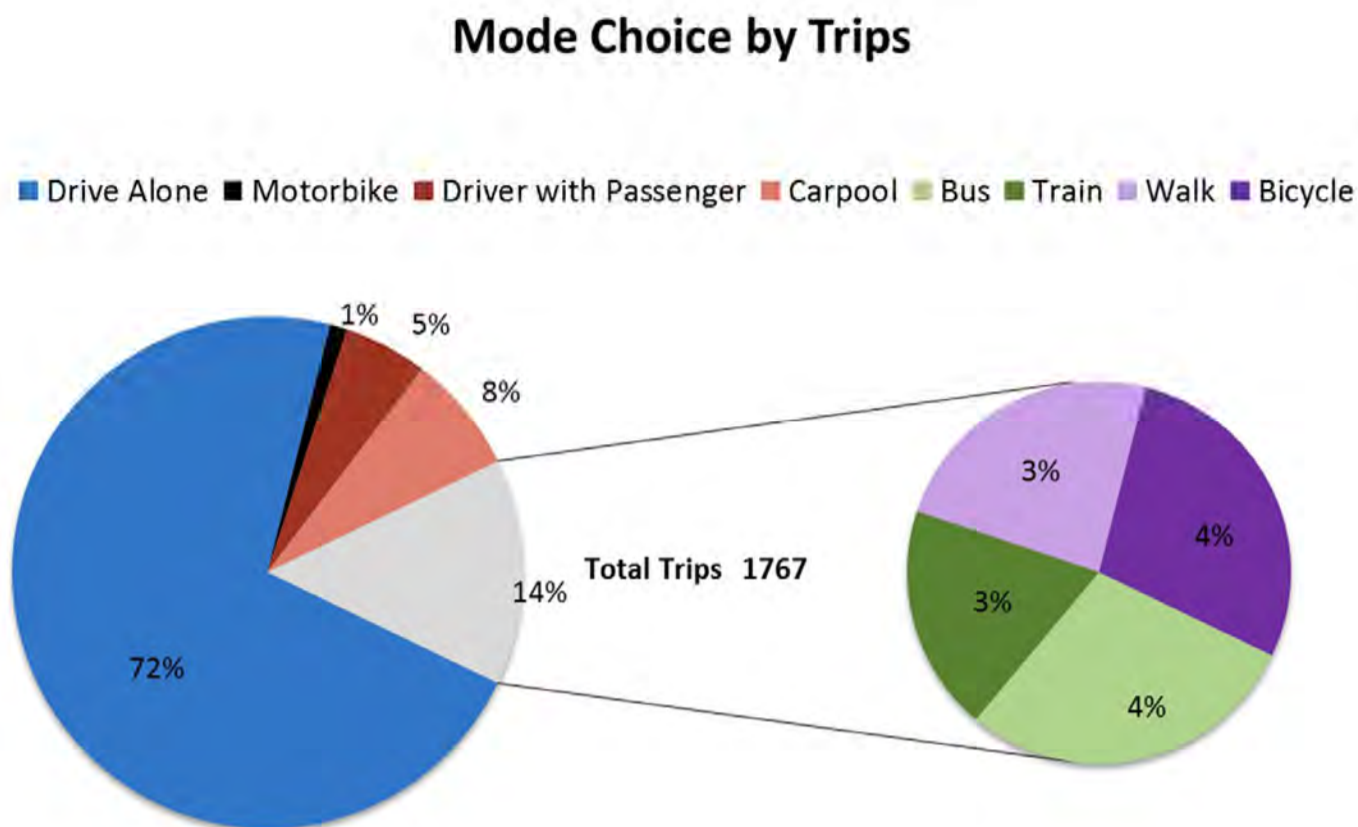


Note: "Other" refers to one of the other tenant organisations located within the HPH.

4.2 Mode Choice

The survey asked respondents to specify the mode of travel used for their journey to work, separating each trip leg (e.g. train then bus) into an individual trip. The results of this are illustrated in Figure 4-3.

Figure 4-3 Staff Journey to Work Mode Choice by Trip



This data may be somewhat skewed towards public transport given that the majority of public transport trips to the site will involve at least one change (e.g. train to bus or bus to bus) and therefore involve some double counting, although it is considered that this will not significantly impact the results.

Figure 4-4 illustrates how HPH mode shares compare to Perth CBD ('Perth City Central') and the overall metropolitan area ('Perth Average'). The graph shows that HPH has a slightly smaller proportion of people in the 'drive alone' mode share than the Perth average. The comparison also clearly shows that HPH has a greater percentage of staff that carpool than Perth City Central and the Perth average. This indicates the initiatives of the previous Travel Plan are beginning to influence behaviour among staff at HPH.

Figure 4-4 Comparison of HPH Mode Share

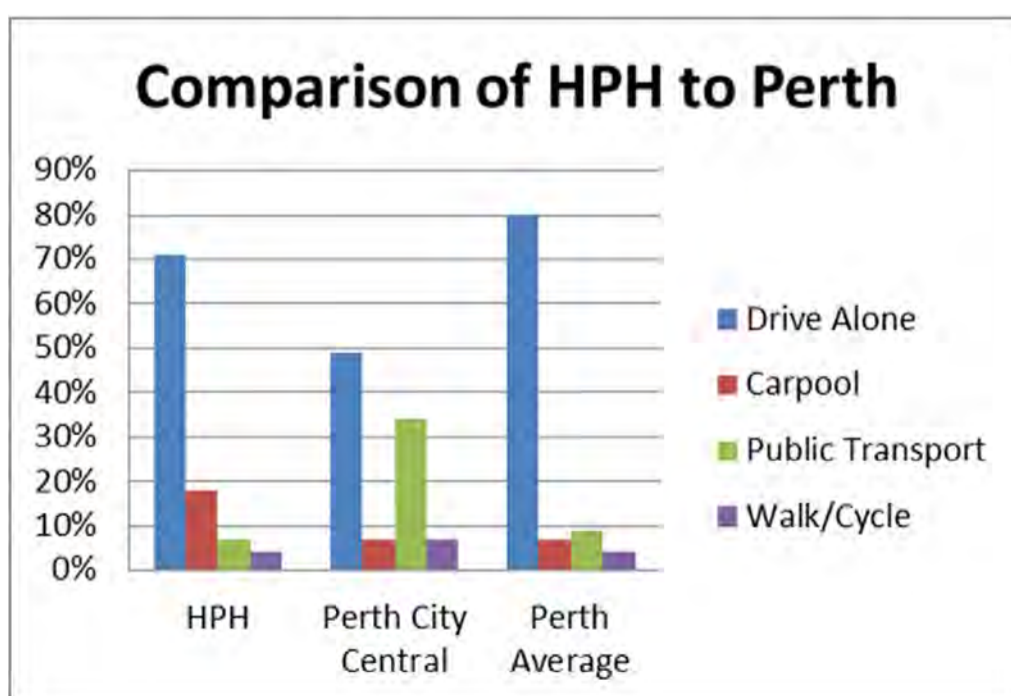
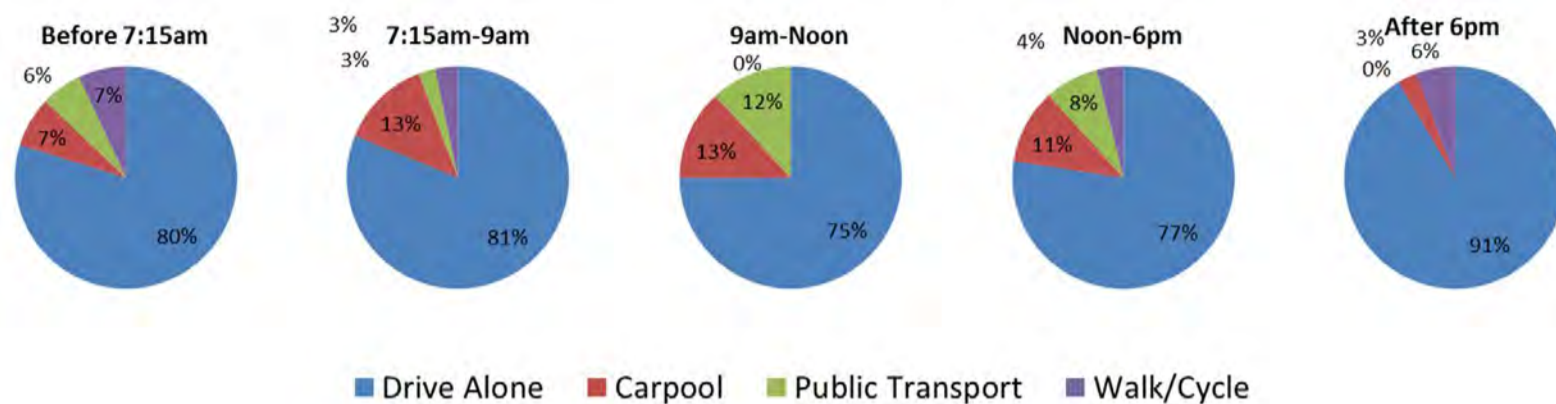


Figure 4-5 illustrates the mode share for journey to work trips to HPH by arrival time. The data shows the 7:15am-9am period is the second highest category for car usage. This is an interesting result given that public transport runs most frequently during this period compared to the other time slots of 'Before 7:15am' and '9am-Noon'. Such a result suggests that convenience is a significant factor in determining the mode of travel for HPH staff.

Figure 4-5 Mode Share by Trip Arrival Time

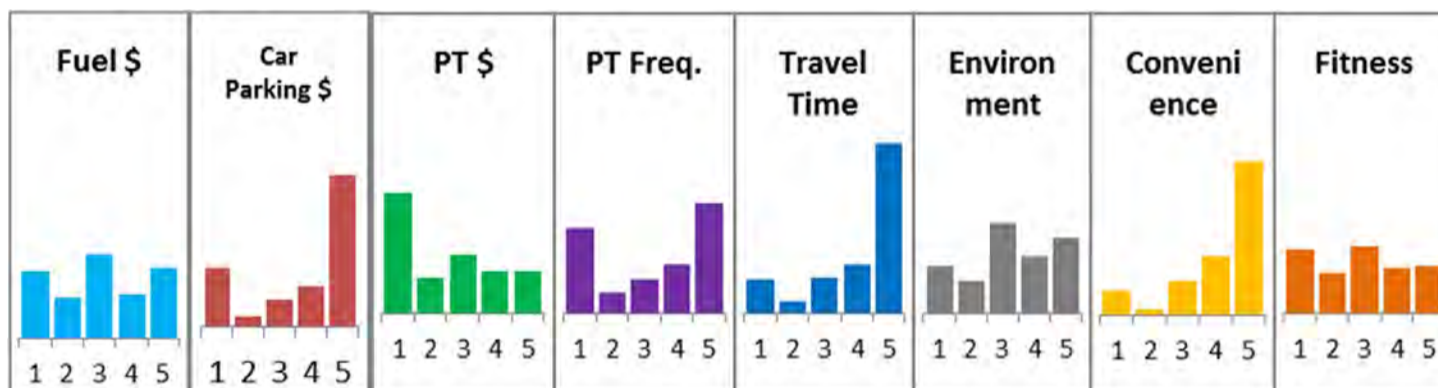


4.3 Mode choice decision making factors

Survey respondents were also asked to respond to a series of discrete choice questions, designed to elicit attitudes towards alternative modes and factors that contribute to mode choice for journeys to HPH.

Figure 4-6 illustrates the factors which contribute to mode choice for HPH staff. Survey respondents were asked to rank each factor by importance – 1 being unimportant to their mode choice decision and 5 being extremely important.

Figure 4-6 Factors affecting mode choice for HPH staff

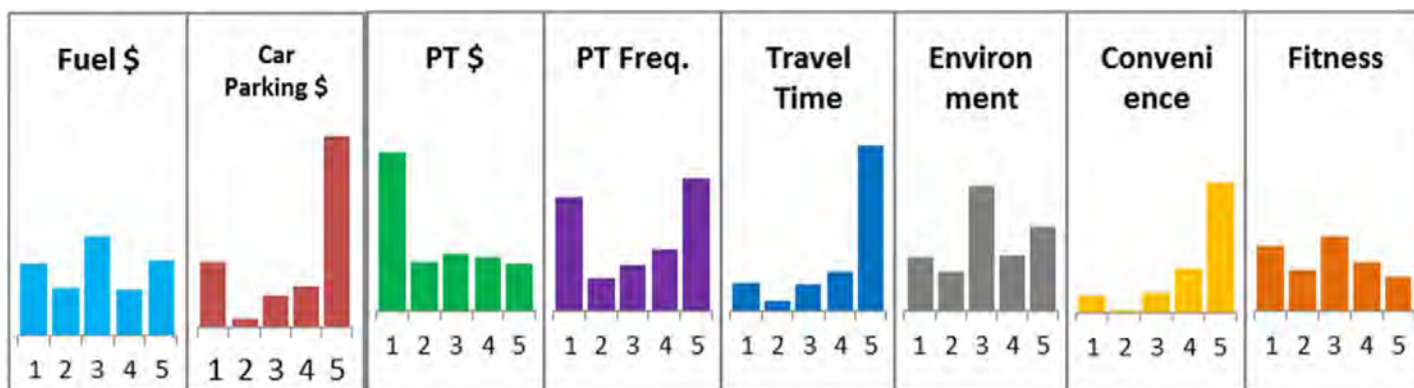


The responses clearly show that parking cost, travel time and convenience are the overarching factors contributing to mode choice decisions.

In order to understand the decision making factors for staff who 'drive alone', the responses from these staff were extracted and are displayed in Figure 4-7. The responses from these staff are generally consistent with those of all survey respondents, indicating that it is the individual circumstance which determines whether a particular mode is cheaper, faster or more convenient, or whether public transport services are sufficiently frequent.

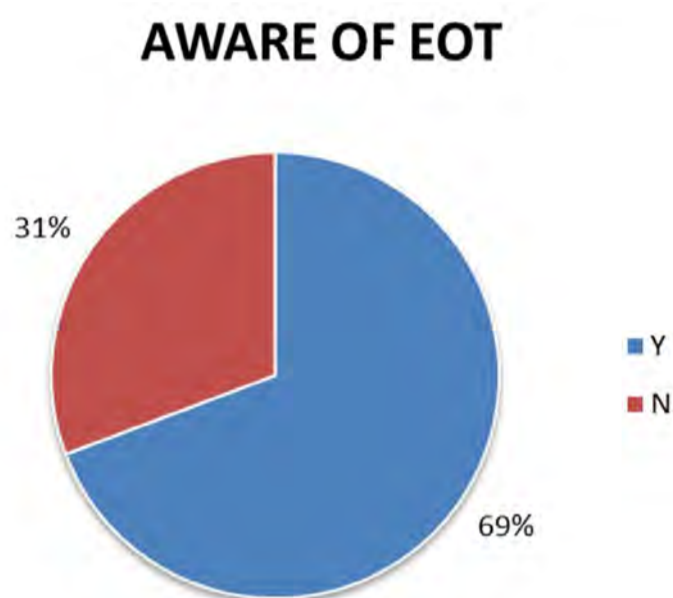
What is also clear from the results is that parking price is a very important factor in mode choice for staff at HPH. Controlling the cost of parking (or controlling the cost of one form of transport to another in relative terms) is therefore the most effective and accessible tool that HPH has at its disposal to affect mode shift.

Figure 4-7 Factors affecting mode choice for HPH staff who currently ‘drive alone’



The awareness amongst staff about the End of Trip facilities available at HPH was also collected through the survey and this is shown in Figure 4-8. The results show that staff generally have a very high awareness of the End of Trip facilities, however there is a sizeable proportion of staff who could be persuaded to try alternative commuting methods if they were made aware of the End of Trip Facilities available at HPH.

Figure 4-8 Staff awareness of End of Trip Facilities

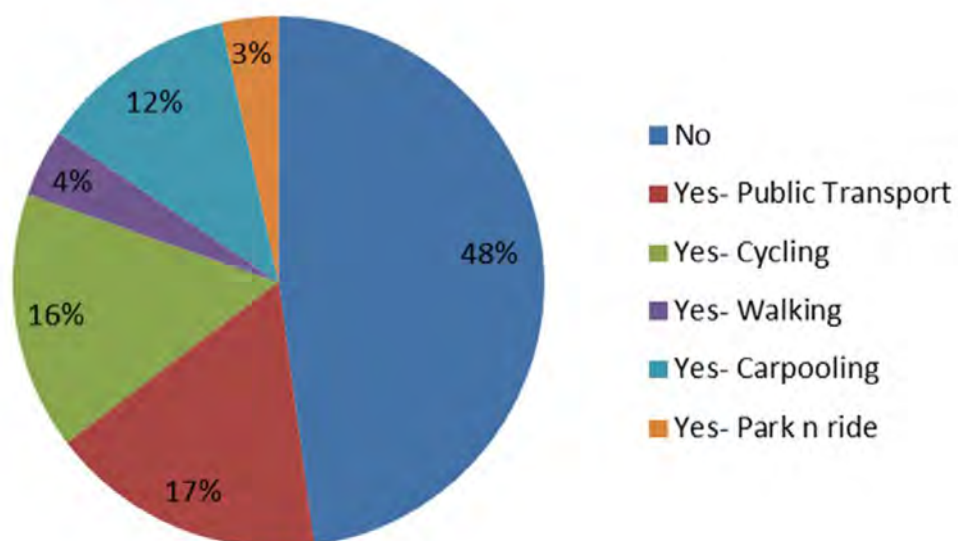


4.4 Consideration to change to another mode of transport

The following question was asked to participants in the survey to ascertain if any of the HPH staff have contemplated changing their mode of transport;

- Have you, in the last 12 months, considered changing from car driver to another mode?

The responses are presented in the chart below, with the percentages of the corresponding answers displayed.



The results presented in the graph show that almost half of HPH staff are resistant to any switch from driving to another mode of transport. The next two highest answers, Yes-Public Transport and Yes-Cycling, comprise 33% of the total response, which indicates that approximately one third of surveyed HPH staff currently consider these modes as potentially viable approaches to commuting.

4.5 Key Learnings and Opportunities

A review of the survey results has identified some key opportunities for encouraging use of sustainable transport modes at HPH. Some of these include:

- > Increasing the cost of parking to reflect the real cost of parking provision. It was noted in the survey results that 'cost of parking' was an extremely important factor influencing travel decisions.
- > The proportion of people cycling to HPH is increasing and this is consistent with the trend across the Perth metropolitan area. This trend should be supported and encouraged by providing and maintaining good quality end of trip facilities.
- > The survey results show that nurses have concerns about their safety when travelling on public transport outside of business hours. The hospital could provide security personnel to walk and wait with staff bus stops around the hospital. Staff could be informed about the PTA's Night Aflight service. On all bus routes operating after 7pm passengers can be dropped off anywhere along the bus route, provided it is safe to do so. This service is important given that over 80% of staff are female.
- > The survey results also show that convenience and travel time are important factors affecting mode choice. The new route 950 service is Perth's highest frequency service and runs every 1-4 minutes during weekday peak hours. This bus service stops near HPH and was introduced in January 2014, therefore staff may be unaware of the service and information and publicity about this service (e.g. on the intranet, newsletters) can increase the number of staff using PT. A significant advantage of this service for HPH commuters is that it allows a one-seat journey to the Beaufort Street corridor, as well as more convenient connections to the Perth Train Station compared to the previous route 79 service which terminated at the Esplanade Busport. These are the sort of features which should be publicised.
- > At least 10% of respondents live in suburbs within comfortable cycling distance (5-10km) of HPH and in suburbs with good cycling access to HPH. These staff represents a key target market for the potential mode shift.

5 The 2014 Travel Plan

5.1 Vision and Objectives

HPH is currently undergoing significant expansion and redevelopment, processes that will continue throughout the lifetime of the Plan. These works will result in HPH becoming the largest private hospital in Western Australia, continuing its leading role as a healthcare provider, trainer and employer.

The vision for the 2014-2019 Travel Plan is:

“HPH will be recognised as an industry leader in supporting sustainable and active travel modes, with a workforce who enjoy and celebrate the benefits of walking, riding, public transport and carpooling for their commute”

The following objectives have been specifically developed for the 2014 Travel Plan. These objectives support HPH’s desire to provide options for staff travel needs through this transitional period, and continue its commitment to increasing use of sustainable travel modes as established in the original travel plan in 2004. HPH’s objectives are:

- 1) To expand awareness of staff travel options to HPH
- 2) To build a happier, healthier and more active HPH workforce
- 3) To encourage and enable travel savings for our team and
- 4) To be a responsible neighbour and recognised leader in green workplace travel

A recognised centre of excellence, HPH currently offer and participate in a wide range of staff wellness, community and environmental initiatives. This Travel Plan focuses on integrating travel plan messages and incentives within other HPH activities, including the ongoing expansion projects. This approach will help to mainstream transport messages and builds on the success of existing promotional campaigns and events.


5.2 Targets and Key Performance Indicators

The following table sets out the key performance indicators and targets to measure the impact of this Travel Plan. The targets are considered to be ambitious yet achievable given the actions proposed in the Plan and third party constraints.

Table 5-1 2014 Travel Plan Targets and Key Performance Indicators

Key Performance Indicator	2013 Travel Survey Result	2014 Travel Plan Targets		
		2016	2018	2020
Percentage of driver only trips	75%	72%	68%	65%
Percentage of employees who cycle	4%	5%	8%	10%
Percentage of employees who walk	0%	1%	1%	2%
Percentage of employees who use public transport	7%	10%	12%	15%

5.3 Actions

Objective	Priority	Partners?
Objective 1: To expand awareness of staff travel options to HPH		
Purpose: To use existing communication processes, resources and events to promote travel options, initiatives and targeted transport messages to the HRP community, particularly staff.		
		
<p>Action 1: Maximise the opportunity held through the ongoing construction projects to raise awareness of transport options for all visitors, staff and students. Utilise the 'We're expanding...' message and include travel promotions within printed, online and electronic project communications.</p> <p>For example:</p> <ul style="list-style-type: none"> 'We're expanding...our travel options' or "Expand your travel choices". Include 'Did you know's' regarding useful information such as the number/frequency of bus services (reflecting the travel survey feedback) and Reference back to the 'We're Expanding...' section of the website for more details. <p>Messages and activities should also be promoted via the Hollywood Star (HPH's quarterly newsletter).</p>	1	
<p>Action 2: To support Action 1, integrate all transport modes into the Expansion project section of the website.</p> <p>For an example, see the Liverpool Hospital (NSW) Active Travel website: http://www.activetravel.net.au/walking-implementation</p>	1	
<p>Action 3: Update existing information regarding transport to HPH to include details regarding all travel options.</p>	1	
<p>Action 4: Update HPH map for 'transport' purposes, to show:</p> <ul style="list-style-type: none"> Motorcycle/scooter parking and the bike parking (available to everyone) Bus stop locations and nominated walking routes Pathways on adjacent street network <p>A version for staff should also include where the secure bike parking facilities are, showers are located and how to gain access. This could be further developed into a Travel Advice Guide (or TAG), available for all staff and included in induction packs.</p>	2	
<p>Action 5: Increase ease of access to public transport service information including:</p> <ul style="list-style-type: none"> Promotion of mobile 'apps' so staff have access to travel information at their fingertips Real time web information on website and intranet Real time displays within shelters or within Hospital, <p>NB: It is understood that bus and train information and timetables are already provided in staff rooms and the hospital foyer. This activity should be continued.</p>	3	Public Transport Authority
<p>Action 6: Increase promotion of the 'walk to car' safely service for staff.</p>		
<p>Action 7: Continue to promote TravelSmart through other fundraising and promotional events. For example, promoting active transport options at the 'Biggest Morning Tea'.</p>	2	
<p>Action 8: Incorporate TravelSmart into existing active lifestyle events and promotions, e.g. HBF Run for a Reason and the City to Surf. For example, training sessions (informal or formal) could be introduced by organisers or by department advocates as appropriate. These training sessions could be timed for commuters and participants could then opt to train by walking or running into HPH with other team members.</p>	2	
<p>Action 9: Continue to promote the TravelSmart log book scheme on a 3 or 6-monthly basis.</p>	2	
<p>Action 10: Undertake a review of pedestrian and cyclist access routes within the HPH site, including external linkages and routes from car parks to buildings and bicycle parking to end of trip facilities. Identify improvements to be implemented in conjunction with the current building programme.</p>	1	

Objective	Priority	Partners?
Objective 2: To build a happier, healthier and more active HPH workforce		
Purpose: To 'build upon' other staff benefits, programs and offerings, existing skills and planned facilities improvements		
Action 1: Throughout the construction phases retain pedestrian and cycle access wherever possible, ensure consideration of heavy vehicle routes to minimise impact on pedestrian and cycling interaction.	1	
Action 2: Advocate for improved walking and cycling links around HPH, including detailed responses to the Draft City of Nedlands and City of Subiaco Bike Plans.	1	
<p>Action 3: Ensure practicality and visibility of existing/planned active transport facilities. For example, as the planned increased provision and improvements for cycling are delivered:</p> <ul style="list-style-type: none"> ▪ Ensure bike parking is visible and conveniently located next to building entrances and that access routes are functional and appropriate. ▪ Co-locate secure parking and showering facilities for staff where possible ▪ Inclusion of bike repair station onsite including bike pump at key secure parking facilities ▪ Consideration of introduction of a bicycle vending machine (replacement inner tubes and so on) <p>The findings of the staff survey identified that 31% of staff weren't aware of end of trip facilities onsite. HPH should promote availability and location of all facilities within existing communication methods and ensure provision of complementary wayfinding and signage for users. For example, the location and access to the existing bicycle tool kit.</p>	1	
Action 4: Provide a small pool of bicycles (e.g. 6 bicycles, 3 e-bikes) for use by employees travelling for work purposes. This pool should also be made available on loan to staff who would like to try cycling to/from work.	2	
Action 5: Utilise the pool bicycles to organise informal after-work bicycle rides for regular, infrequent and beginner cyclists.	3	
<p>Action 6: Integrate active transport with Corporate Wellness Program through provision of existing resources, and promotional tools.</p> <p>The Corporate Wellness program also provides specific training events and offerings, through which active transport could be integrated such as enabling those who would like to ride, to be able to do so safely and with confidence. Through the Corporate Wellness program, could provide adult cycle confidence training and maintenance for those who request it i.e. training and upkeep.</p>	2	

Objective	Priority	Partners?
Objective 3: To encourage and enable travel savings for our team		
Purpose: Identifying opportunities to help save our team time and money through choosing more sustainable and active travel modes as part of their commute		
Action 1: Continue existing TravelSmart logbook programme and financial incentives.	1	
Action 2: Increase promotion (via existing communication mechanisms and events) of the Bicycling Entrepreneur 10% discount. Speak with the retailer about how many staff are taking up the offer and if they have suggestions for expanding relationship For example: <ul style="list-style-type: none"> ▪ Cycle 'Spring Clean' – offer onsite bicycle maintenance for staff in advance of the Cycle Instead initiatives ▪ "Try before you buy" bike loan scheme 	2	
Action 3: Investigate collaboration between HPH and QEIMC Carpooling Programs to widen the potential pool of carpoolers. This may include cross-promotion of carpooling opportunities between the two sites, however the impact of potential additional parking demand at HPH will need to be considered and monitored.	3	QEII Medical Centre Trust
Action 4: Continue the provision of dedicated carpooling bays and increase supply to match demand.	1	
Action 5: Provide a pool of umbrellas for use by TravelSmart log book programme participants to cater for adverse weather conditions.	2	
Action 6: Continue the Guaranteed Ride Home programme for TravelSmart participants and ensure that employees are aware of this facility.	1	
Action 7: In conjunction with the TravelSmart log book programme, investigate the provision of preferential parking for employees who use sustainable transport modes at least three days per week.	2	
Action 8: Form of a Bicycle User Group to represent commuter and fitness cyclist interests at HPH. Investigate the potential to collaborate with QEIMC BUG.	2	QEII Medical Centre Trust
Action 9: Implement a dry cleaning service for use by employees, so that walkers and cyclists do not need to bring fresh clothes to work every day or week. Investigate collaboration with QEIMC.	2	
Action 10: Investigate opportunities for staff to top up their Smart Rider via salary sacrifice or other employer-subsidised methods.	2	Public Transport Authority
Action 11: Investigate the possibility of allowing employees who walk or cycle to work to have 15 minutes paid time to shower, change etc. at the start of a shift.	2	Tenants

Objective	Priority	Partners?
Objective 4: To be a responsible neighbour and recognised leader in green workplace travel		
Purpose: Work with surrounding organisations and government agencies to ensure maximum benefit and opportunity for the Travel Plan delivery		
Action 1: Actively engage with the DoT TravelSmart Workplaces program, attend events and integrate support packages.	2	Department of Transport
Action 2: Demonstrate leadership through Corporate Challenges over September and October (i.e. could issue a challenge to other healthcare organisations to participate)	2	Department of Transport
<p>Action 3: Actively engage with the DoT TravelSmart program to identify opportunities to co-ordinate events and integrate promotional activities and resources.</p> <p>For example:</p> <ul style="list-style-type: none"> ▪ Developing a variant of the existing DoT walking and cycling maps specific to HPH ▪ Regularly promoting and running events awarding prizes for participation in the TravelSmart Program which acknowledges Executive Support (one prize to be given out each month) <p>Continuing participation in Bike Week events</p>	2	Department of Transport
<p>Action 4: Support existing relationships with Hollywood Primary School to promote safe active travel in the area.</p> <p>For example:</p> <p>Ensure staff are aware of events such as Ride or Walk to School days. Messages should outline that they are likely to encounter more children on their way to and from the site during these periods.</p>	2	Hollywood Primary School

6 Monitoring and Evaluation

6.1 Why monitor and evaluate the Travel Plan?

Monitoring and evaluation of a Travel Plan is critical to its success, ensuring that a record is kept of what actions are actually implemented, their timing, and enabling an assessment of their effectiveness.

The following section sets out the recommended monitoring and evaluation activities.

6.2 Annual Reporting

HPH should prepare a brief Annual Report, outlining the progress implementing the actions in the Travel Plan. Key features of the report should include:

- > Actions implemented
- > Actions planned for implementation in the next 12 months
- > Reasons for not implementing any actions not included in the above two categories
- > A summary of constraints identified in implementing any of the actions
- > Anecdotal evidence indicating the effectiveness of actions
- > A summary of any qualitative and quantitative evaluation carried out – e.g. how many people attended a cycling breakfast
- > A record of lessons learned on the effectiveness of different strategies

This reporting should ensure that the corporate knowledge accumulated through the Travel Plan process is retained regardless of any changes in staff, and ensure that the Executive is aware of the progress of the Plan.

6.3 Travel Survey

A Travel Survey of staff, visitors and outpatients should be undertaken once every two years, at a minimum. The Travel Survey should contain questions which are consistent with previous surveys to ensure that the data collected can be accurately compared over multiple years to identify short, medium and long term trends.

As far as possible, the Survey should be undertaken at a consistent time of year to minimise the risk of seasonal factors distorting the results.

6.4 Travel Plan Review and Update

At the end of a period of 5 years, the effectiveness of the Travel Plan should be comprehensively reviewed.

A new Travel Plan should then be prepared to guide the next 5 years of Travel Demand Management initiatives.

About Cardno

Cardno is an ASX200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage and deliver sustainable projects and community programs. Cardno is an international company, listed on the Australian Securities Exchange [ASX: CDD].

Contact

Perth

11 Harvest Terrace
West Perth WA 6005

PO Box 447
West Perth WA 6872

Phone +61 8 9273 3888

Fax +61 8 9486 8664

wa@cardno.com
www.cardno.com



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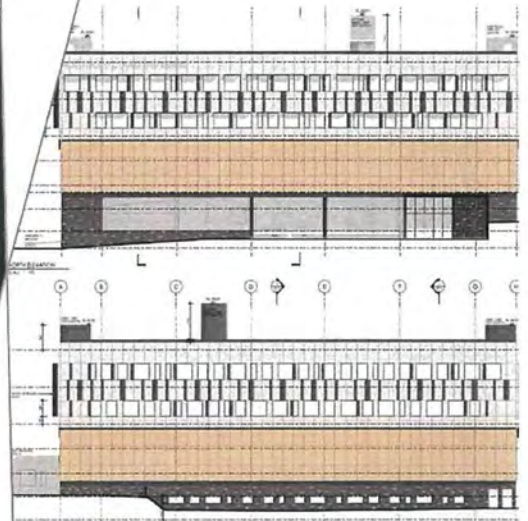
Transport Impact Assessment

Hollywood Private Hospital Medical
Centre

CW1004000

Prepared for
Ramsay Health Care

5 July 2018



Contact Information**Cardno (WA) Pty Ltd**

ABN 77 009 119 000

11 Harvest Terrace

West Perth 6005

Australia

www.cardno.com

Phone +61 8 9273 3888

Fax +61 8 9486 8664

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Traffic Engineer

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Executive Summary

This Transport Impact Assessment outlines the transport aspects of the proposed development focusing on traffic operations, loading vehicle operations, access and car parking. Provided also are walking, cycling, and public transport considerations.

This statement has been prepared in accordance with the WAPC *Transport Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016)*.

The following conclusions are regarding the proposed development:

- > The proposed development consists of a medical centre with 33 consulting rooms, a section reserved for future hospital services and 3 levels of car parking.
- > There is currently good footpath connectivity to a number of local bus stops from the Site. The bus stops cater for a number of local bus services including routes to Fremantle, Claremont, Subiaco, Morley and the CBD.
- > Cycling infrastructure within the surrounding area of the Site is average with disjointed paths and a lack of high quality connections. However, the design of the Winthrop Avenue Bike Facility is currently underway, which will greatly benefit cycling connection to HPH once completed.
- > The proposed development will have a trip generation of approximately 334 vehicles in the AM peak and 381 vehicles in the PM peak hour.
- > Site access to the consulting centre will use the existing accesses into the Hollywood Private Hospital Precinct. Current access arrangements will remain generally unchanged in all future scenarios, with the bulk of the vehicle traffic generated by HPH entering and exiting via Monash Avenue.
- > A SIDRA assessment was conducted for the key intersections and accesses located near the Site. Almost all intersections operate within acceptable capacity limits during both peak hour periods. Overall the traffic impacts of the proposed development is unlikely to have a significant effect on the function of the surrounding road network.
- > The proposed parking provision for the medical centre is within the parking cap imposed by the WAPC for the Hollywood Private Hospital.

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1 Introduction

1.1 Background

Cardno has been commissioned by Ramsay Health Care ('the Client') to prepare a Transport Impact Assessment (TIA) for the proposed medical consulting centre ('the Site'), located within the Hollywood Private Hospital Precinct, Nedlands.

This report aims to assess the impacts of the proposed development upon the adjacent road network, with a focus on traffic operations, circulation, and car parking requirements. This report has been prepared in accordance with the Western Australian Planning Commission (WAPC) *Transport Assessment Guidelines for Developments: Volume 4 – Individual Developments* (2016) and the checklist is included in **Appendix A**.

Figure 2-3 Surrounding Area Key Generators



2.4 Existing Road Network

The layout and classification of the roads surrounding the Site is presented in **Figure 2-4**.

Road classifications are defined in the Main Roads Functional Hierarchy as follows:

- **Primary Distributors (light blue):** Form the regional and inter-regional grid of MRWA traffic routes and carry large volumes of fast-moving traffic. Some are strategic freight routes, and all are National or State roads. They are managed by Main Roads.
- **Regional Distributors (red):** Roads that are not Primary Distributors, but which link significant destinations and are designed for efficient movement of people and goods within and beyond regional areas. They are managed by Local Government.
- **District Distributor A (green):** These carry traffic between industrial, commercial, and residential areas and connect to Primary Distributors. These are likely to be truck routes and provide only limited access to adjoining property. They are managed by Local Government.
- **District Distributor B (dark blue):** Perform a similar function to “District Distributor A” but with reduced capacity due to flow restrictions from access to and roadside parking alongside adjoining property. These are often older roads with traffic demand in excess of that originally intended. District Distributor A and B roads run between land-use cells and not through them, forming a grid that would ideally be around 1.5 kilometres apart. They are managed by Local Government.
- **Local Distributors (orange):** Carry traffic within a cell and link District Distributors at the boundary to access roads. The route of the Local Distributor discourages through traffic so that the cell formed by the grid of District Distributors only carries traffic belonging to or serving the area. These roads should accommodate buses but discourage trucks. They are managed by Local government.
- **Access Roads (grey):** Provide access to abutting properties with amenity, safety and aesthetic aspects having priority over the vehicle movement function. These roads are bicycle and pedestrian friendly. They are managed by Local government.

Figure 2-4 Existing Road Network Classification



Source: Main Roads Road Information Mapping System (2018)

The characteristics of the surrounding road network are discussed as follows:

- > **Monash Avenue** is classified as a Distributor B according to the MRWA Metropolitan Functional Road Hierarchy with a posted speed of 50km/h. It is a two-lane single carriageway with a sealed width of approximately 7.2m. The section between Smyth Road and Williams Road North has a school zone speed limit of 40km/h during the two periods 7:30am to 9:00am and 2:30pm to 4:00pm on school days. On-street indented parking is provided on both sides of the road between Smyth Road and Williams Road North and on the northern side of the road only between Williams Road North and Clifton Street.
- > **Smyth Road** is classified as a Distributor B according to the MRWA Metropolitan Functional Road Hierarchy with a posted speed of 50km/h. It is a two-lane single carriageway with a sealed width of approximately 7.2m. Sealed shoulders are provided on both sides of the road, with a width of approximately 2.0m. The section of road approximately 160m to the north and 70m to the south of the Monash Avenue/Smyth Road intersection has a school zone speed limit of 40km/h during the two periods 7:30am to 9:00am and 2:30pm to 4:00pm on school days. A blister island has been installed at approximately 170m north of the Monash Avenue/Smyth Road intersection.
- > **Verdun Street** is classified as an Access Road according to the MRWA Metropolitan Functional Road Hierarchy with a posted speed of 50km/h. It is a two-lane single carriageway with a sealed width of approximately 6.2m. On-street indented parking is provided on the northern side at the western end of the road before the corner of Verdun Street/Lupin Hill Grove intersection. No parking is allowed along the remainder of the road. A slow point treatment has been installed between Lupin Hill Grove and Kitchener Street.

2.5 Traffic Volumes

Existing traffic volumes were sourced from the Main Roads WA Traffic Map. The data is summarised in **Table 2-1** below.

Table 2-1 Existing Traffic Volumes (two-way)

Road Name	Date	Average Weekday Two-way Traffic Volume	Vehicles - AM Peak Hour	Vehicles - PM Peak Hour
Monash Avenue, west of Hampden Road	2014	8,918	701	568
Smyth Road, north of Monash Avenue	2016	12,808	1,320	1,115
Hampden Road, south of Monash Avenue	2014	7,420	596	580

Source: Main Roads WA accessed 24 June 2018

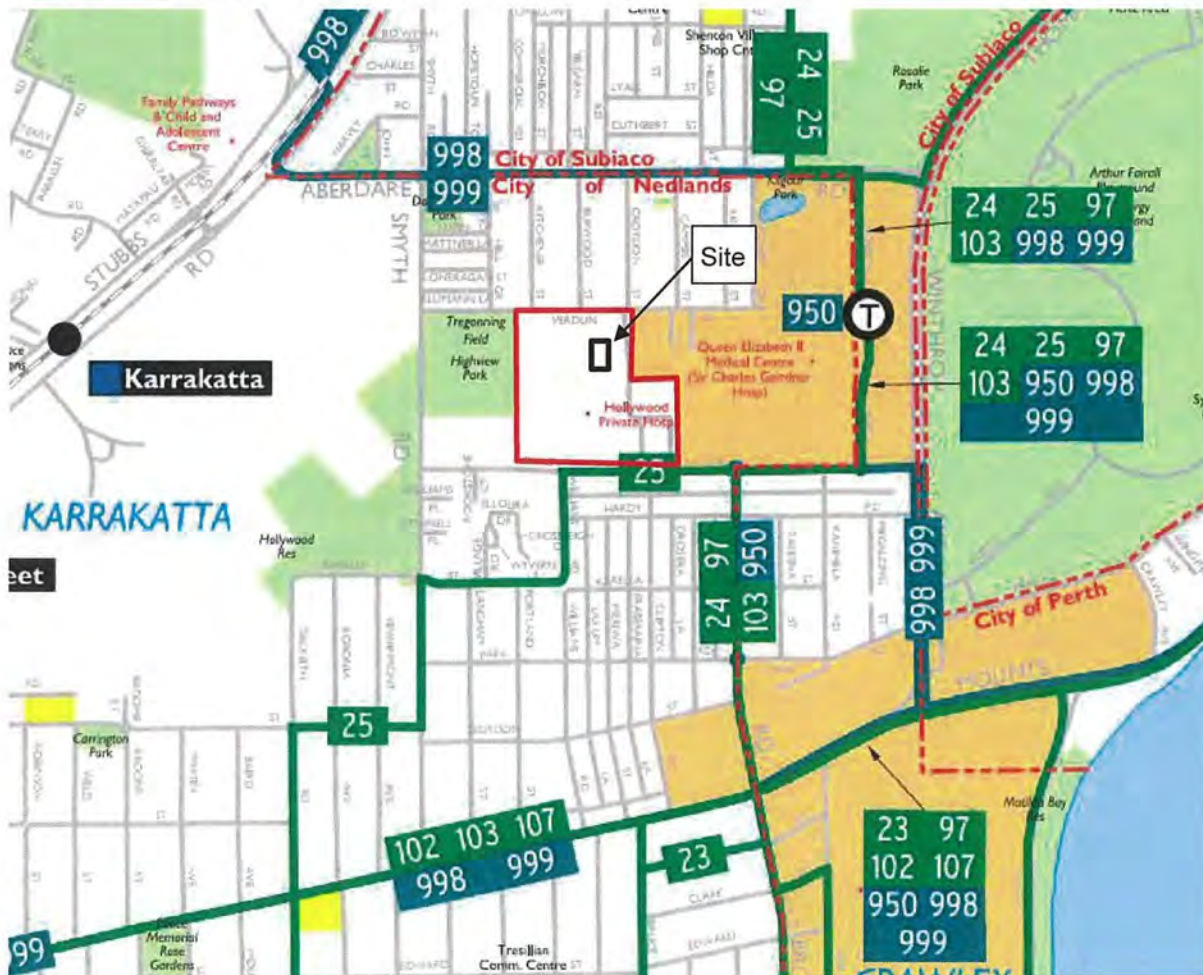
3 Public Transport Facilities

3.1 Existing Public Transport Facilities

- > The current bus services available to staff at HPH include the following routes:
- > Route 24 (Claremont Station to East Perth);
- > Route 25 (Claremont Station to East Perth);
- > Route 97 (UWA to Subiaco via QEII Medical Centre) with train connection at Subiaco Train Station;
- > Route 998/999 (Circle Routes);
- > Route 103 (East Perth to Fremantle);
- > Route 950 (Morley to QEII Medical Centre via Beaufort Street/Perth City/UWA).

The location of these bus routes relative to HPH are shown in **Figure 3-1**.

Figure 3-1 Excerpt from Transperth Network Map



Source: Transperth (2017)

The level of service provided by each of these bus routes is highly variable and this is shown in **Figure 3-2** and **Figure 3-3**.

Figure 3-2 Bus frequency at HPH towards Perth CBD by Route

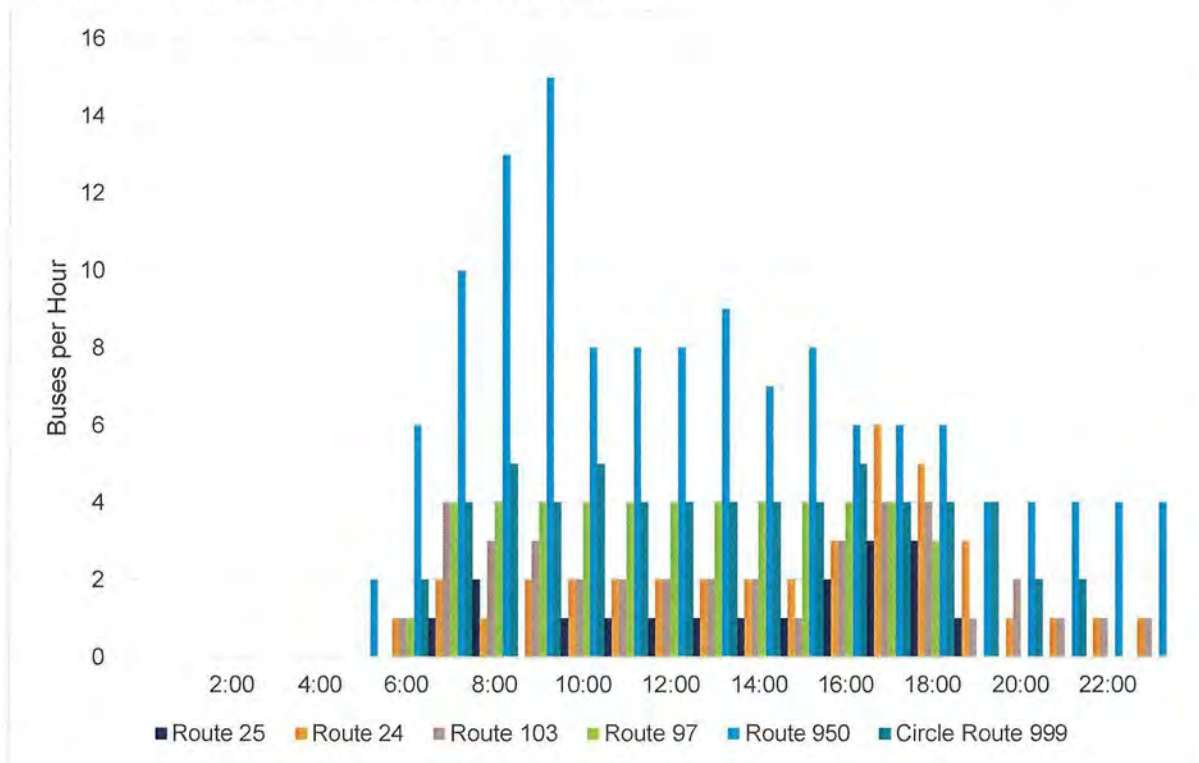
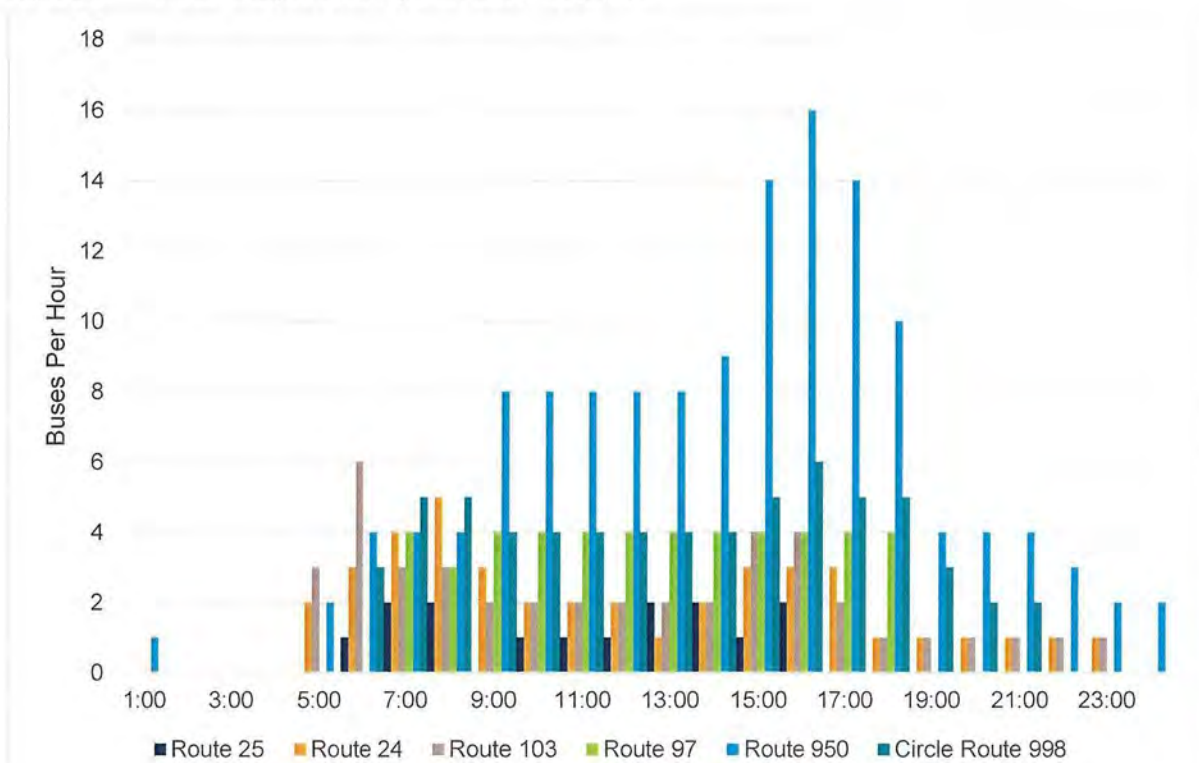


Figure 3-3 Bus frequency at HPH away from Perth CBD by Route



Aggregating these routes by origin destination indicates the real level of service for passengers, as shown in Figure 3-4 and Figure 3-5 below.

Figure 3-4 Bus Frequency to HPH by Origin

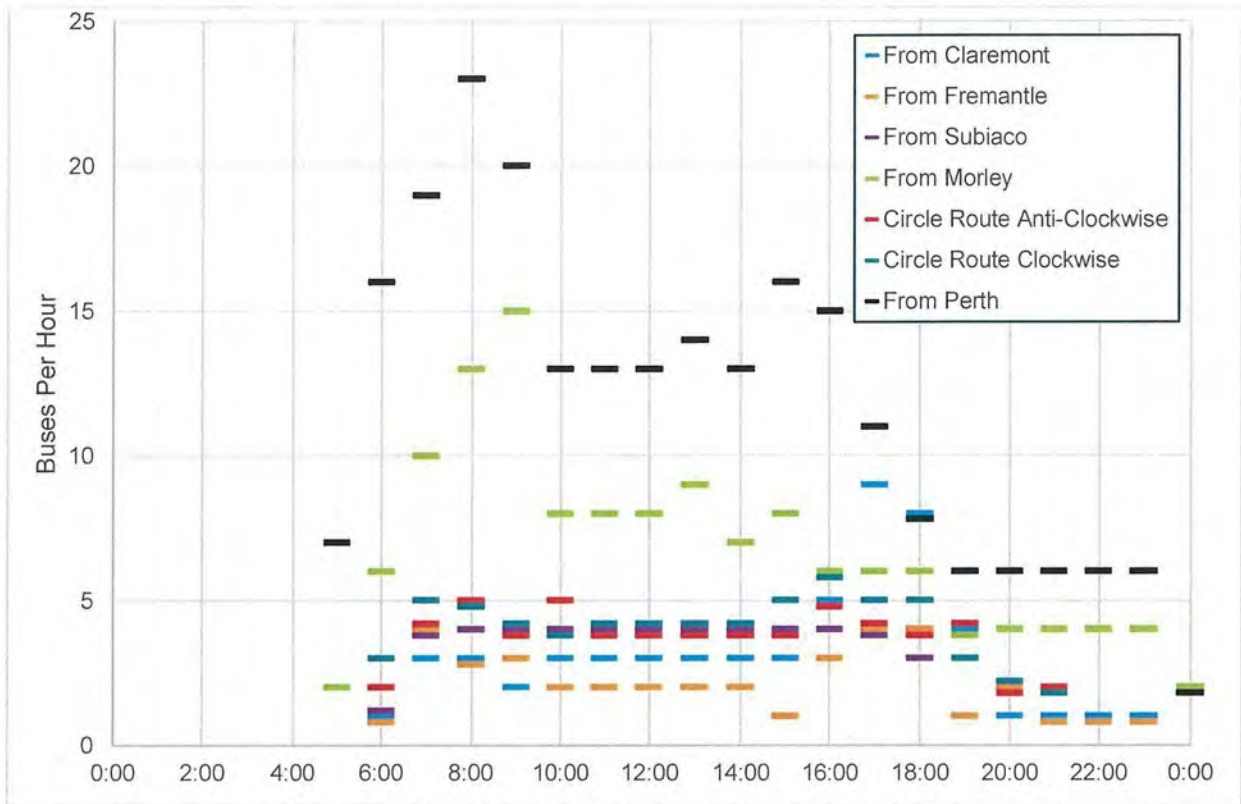
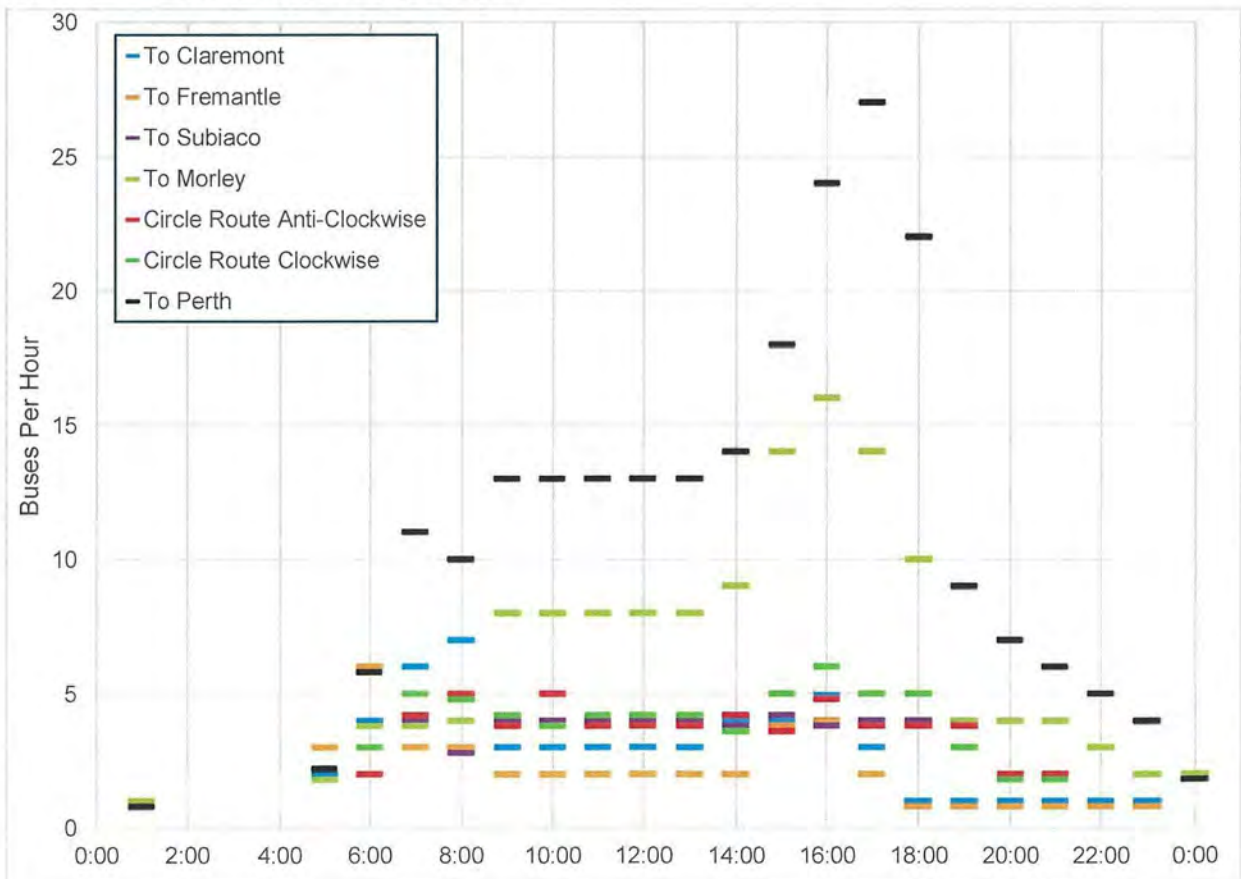


Figure 3-5 Bus Frequency from HPH by Destination



It is recognised that for many staff and visitors to HPH, it is not the public transport in the immediate vicinity of the site which is an obstacle to travel but often it is the 'first leg' of the journey – i.e. getting from home to the bus stop or train station. State Government initiatives such as providing over 3,000 additional car parking bays at train stations, and improving feeder bus services to the rail network will assist in improving accessibility over time, complementing the reasonable quality links between HPH and the rail network.

Bus services in the vicinity of HPH are centred on QEII Medical Centre and the main interchange on Hospital Avenue. This interchange is located an approximately 15 minute walk from HPH; however there are bus stops located closer to HPH for most of these services which would reduce the walking time for HPH staff.

Figure 3-6 illustrates the location of the nearest bus stops for each bus route serving HPH.

Figure 3-6 Bus stop locations and walking distances



As seen above, the closest bus stops available to HPH staff are as follows:

- Monash Avenue (Route 25) ~75m from the main building entrance.
Unfortunately this stop only serves Route 25 which is an infrequent, coverage service that is unattractive to potential commuters.
- Hampton Road (Routes 24, 97, 103 and 950) ~ 425m away from the main building entrance.
This stop provides HPH commuters access to the most frequent routes, including the high-frequency Route 950. However, it is at the edge of a reasonable 400m walking catchment for staff.

- > Aberdare Road (Route 998/999) ~500m from the rear entrance (via Verdun Street).

This stop serves only the Circle Route which provides a coverage service to the inner-middle metropolitan area. It creates an important local opportunity for community and staff transport, but is generally too slow to support high demand origin-destination use.

3.2 Future Public Transport Facilities

The *Draft Public Transport for Perth 2031* plan was released by the Department of Transport in 2011, setting out the future investment in high quality public transport services and infrastructure. Key relevant projects included in the draft plan include:

- > Bus Rapid Transit along Mounts Bay Road between the Esplanade Busport and UWA (by 2020)
- > Light Rail between Glendalough, Subiaco and QEIIIMC (by 2031)
- > MAX Light Rail between Perth CBD, QEIIIMC and UWA. This project was shelved by the previous WA Government and ultimately cancelled in 2016.

However, it is noted that the change of State Government has significantly altered the priorities and delivery timeframes for works in this plan and therefore it is unknown in what form improvements to public transport will be delivered.

Provided that the bus rapid transit projects include public transport priority facilities (e.g. segregated lanes, signal priority etc.), they will result in a reduction in travel time between Perth CBD and QEIIIMC (and therefore HPH). More importantly, the reliability of services will be improved by reducing the potential for traffic delays to affect public transport services, which is currently a major problem on Thomas Street and Mounts Bay Road.

Even with the abovementioned improvements to public transport, HPH will continue to be less accessible than neighbouring QEIIIMC.

The *Perth and Peel Transport Plan for 3.5 Million People and Beyond* was released by the Public Transport Authority (PTA) in 2016, which is a planning framework aimed at reducing private vehicle mode share and increasing active transport modes such as public transport, cycling and walking. This includes key infrastructure and service upgrades of transport network to cater for a population of 3.5 million and beyond. Key relevant projects included in the plan include:

- > Perth Orbital - an orbital rail service connecting the significant activity centres of Stirling, QEIIIMC, UWA, Murdoch (which includes Fiona Stanley Hospital and Murdoch University), Perth Airport and Morley.
- > Inner-City Subway System - a proposed separate subway system which will provide high capacity, high frequency, short distance connections between central Perth, East Perth, West Perth, Northbridge, Leederville, South Perth and other inner city centres. As this is a long term proposal (beyond 3.5 million), it is unknown how this project will affect the HPH.

3.2.1 East Wanneroo Rail Link

The newly proposed East Wanneroo Rail Link provides an effective public transport solution for the north-eastern suburbs, eliminating the need for light rail through the central northern corridor.

3.2.2 METRONET

A business case was presented by the Labor Government for METRONET to Infrastructure Australia. Proposals include:

- > Building a Morley-Ellenbrook line
- > Extending the Northern Suburbs line to Yanchep
- > Extending the Armadale Line to Byford
- > Commencing a Circle Line linking the Mandurah Line to the Thornlie Line
- > Building a new station at Karnup.

According to Labor's policy statement on METRONET, if approved, Shenton Park station will be directly serviced by links from Ellenbrook, Midland, and Perth Airport as well as on a South Circle Line which connects it to the CBD the Airport, Thornlie and Coogee.

Figure 3-7 METRONET



3.2.3 Perth Orbital

According to the Perth and Peel *Transport Plan* which was published prior to the change in State Government in 2017, a new orbital service is proposed in order to complement Perth's robust radial rail network and provide easier access between major activity centres without requiring transfers through CBD stations. Whether or not this plan will continue is yet to be confirmed in light of Labor's METRONET proposal however for completeness details are provided here.

The Perth Orbital will connect to the Joondalup line at Stirling, the Fremantle line through a redeveloped station at Shenton Park, and the Mandurah line at Murdoch. The completed orbital, which will require extensive tunnelling, will ultimately allow travel around the central region of the city from Murdoch to stations

on the Thornlie, Armadale, Forrestfield, Midland and East Wanneroo lines, making a complete circle around the CBD.

The Stirling-Murdoch stage of the Perth Orbital will connect UWA, QEII, Murdoch (which includes Fiona Stanley Hospital, St John of God Murdoch private hospital and Murdoch University), Stirling, Shenton Park and Booragoon. This new orbital route will provide relief to the critical inner segment of the Joondalup line and Perth Underground Station, where capacity will be under most pressure in the future and has the potential to defer the need for a new road crossing the river.

Figure 3-8 shows the map of the proposed transport network @ 3.5 million and beyond. Disregarding the Inner City Subway System, the remaining two projects involve QEII/IMC as a key transport hub (as in many of the other proposals). Taking this into consideration, there is an opportunity for HPH to utilise QEII/IMC as a transfer hub, providing shuttle buses to transport visitors, patients and staff between both sites. This could be considered as a long term outcome as many of these proposals are at early concept stages.

Figure 3-8 Integrated Mass Transit Network @ 3.5 Million and Beyond



Source: Perth and Peel Transport Plan for 3.5 Million People and Beyond

4 Pedestrian/Cycle Networks and Facilities

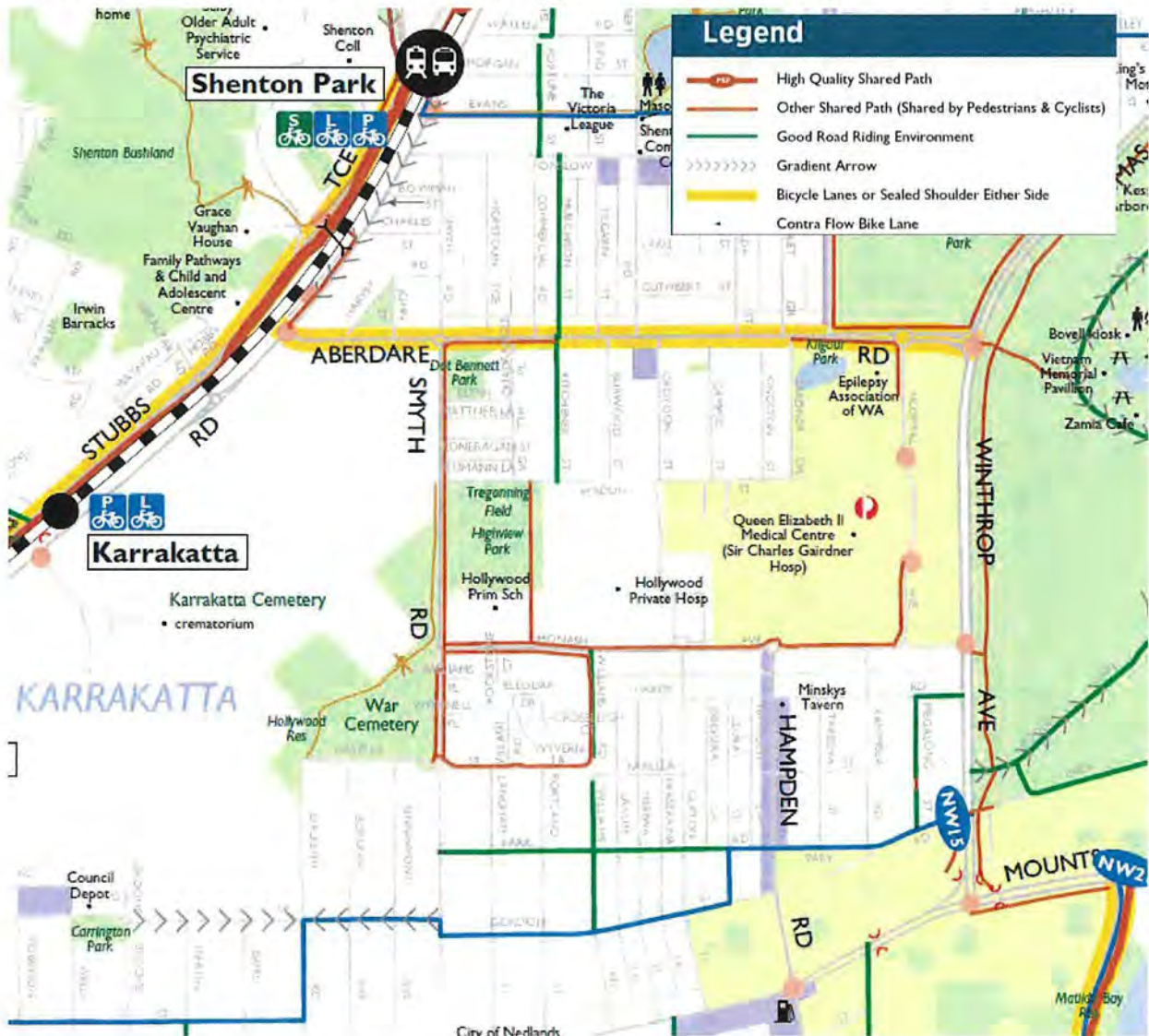
4.1 Existing Pedestrian/Cycle Network Facilities

Existing external cycling facilities are shown in **Figure 4-1**, from an excerpt from the Department of Transport's cycling maps. It should be noted that a reasonable quality shared path also exists along the northern side of Monash Avenue, between Smyth Road and Winthrop Avenue, which is not shown on the map.

These external facilities are connected to HPH through a series of path and roadway access points along Monash Avenue and Verdun Street, providing convenient access for pedestrians and cyclists. Once inside the site, cyclists can utilise the low speed internal road network to reach the bicycle parking and pedestrians can utilise the internal path network.

Cycling can potentially be intimidating for less confident cyclists, particularly if they have not yet cycled the routes. However there are several quiet street approach routes to HPH which could be used by less confident cyclists, e.g. Williams Road, Kitchener Street and Burwood Street/Herbert Road. Additionally, there are several shared paths through Kings Park which provide convenient routes away from traffic to Perth CBD.

Figure 4-1 Excerpt from Department of Transport Cycling Map



Source: Department of Transport WA (2016)

Cycling is not currently a popular travel mode for staff, with only 4% of trips taken by bike. However, when asked “Have you, in the last 12 months, considered changing from car driver to another mode?”, 16% of staff stated that they had considered a shift to cycling. This suggests that there is some latent demand for cycling if the transport environment changed.

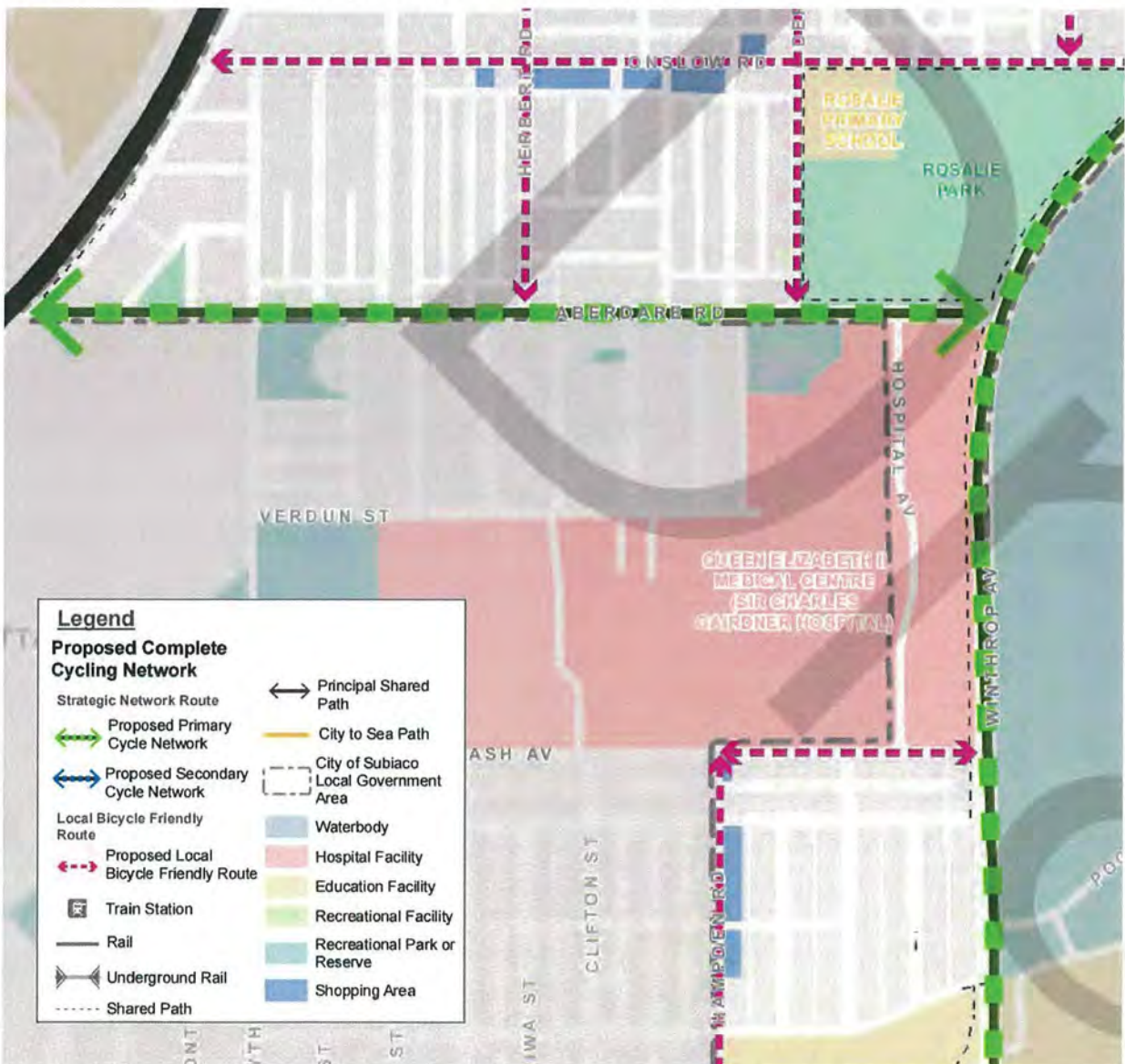
The local bike network is disjointed and lack in high quality connections from major cycling corridors including the Fremantle Rail Line PSP and the Freeway PSP (via Winthrop Avenue). Additional infrastructure is desirable along Aberdare Road, Winthrop Avenue and Monash Avenue, as well as improved accessibility and wayfinding along approach routes and at the site boundary.

4.2 Future Pedestrian/Cycle Network Facilities

It is understood that the City of Nedlands has proposed shared paths along Carrington Street and Park Road, in the vicinity of HPH.

The City of Subiaco has also prepared a Bike Plan which includes the following network, **Figure 4-2**.

Figure 4-2 Excerpt from the Draft City of Subiaco Bike Plan, Ultimate Network



It is understood that design of the Winthrop Avenue Bike Facility is currently underway, which will greatly benefit cycling connection to HPH once completed.

The Department of Transport's *Cycling Network Plan for Transport @ 3.5 Million* document identifies future infrastructure improvements as follows:

- > Winthrop Avenue, PSP
- > Aberdare Road, Strategic Route
- > Monash Avenue, Local Route
- > Smyth Road, Local Route.

These routes correspond to infrastructure according to the following definition:

	PSPs	Strategic routes	Local routes	RSPs
Colour	Red	Blue	Green	Pink
Objective	To provide fast, direct commuting routes parallel to high-speed corridors such as freeways and railway lines.	To provide safe and direct connections between various strategic, secondary, district and specialised activity centres, as well as train stations.	To collect cycling traffic from local roads within suburbs and distribute it to the Strategic and PSP networks. To provide safe a direction connections to local destinations such as schools, shops and parks.	To provide recreational cycling facilities around Perth's various natural features including the Indian Ocean, the Swan-Canning River System, various lake systems and remnant bushland.
Analogous to	Freeways	Arterial Roads	Collector Roads	Tourist Routes
Density	Approx. 5km x 5km	Approx. 2.5km x 2.5km	Approx. 1.5km x 1.5km	N/A
Built Form	Shared paths of PSP standard. Wherever possible, grade separation should be provided at intersecting roads/railways.	<ul style="list-style-type: none"> - Shared paths of PSP standard where room permits (grade separation in not necessary). - Separated bi-directional cycle lanes, or - Bicycle boulevards 	<ul style="list-style-type: none"> - On-road cycle lanes, - Bicycle boulevards, or - Designated quiet suburban streets, communicated using sharrows or appropriate signage. 	Shared paths of PSP standard.

Source: *Cycling Network Plan for Transport @ 3.5 Million*

This defines a strategic direction for cycling infrastructure in the area that supports HPH. However it is noted that infrastructure is delivered by Local Government.

5 Proposed Development

5.1 Proposed Land Uses

The proposed medical consulting centre consists of 33 consulting room including a section reserved for future hospital services. The proposed development plans are provided in **Appendix B**. The building contains three levels of parking as described below;

- > Level -3 – 34 bays (6 ACROD bays)
- > Level -1 – 110 bays
- > Level 0 – 116 bays
- > Total parking – 260 bays

5.2 Access Arrangements

Site access to the medical consulting centre will use the existing accesses into the Hollywood Private Hospital Precinct. Current access arrangements will remain generally unchanged in all future scenarios, with the bulk of the vehicle traffic generated by HPH entering and exiting via Monash Avenue.

In order to minimise the impacts on residents to the north of the site, it is proposed to continue to restrict vehicle access to/from the site via Verdun Street, thereby maintaining traffic volumes at or around current levels on the Verdun Street access points. These access points will continue to remain available for use by pedestrians and cyclists. **Figure 5-1** shows the location of the accesses to the Hollywood Private Hospital.

- > Monash Avenue/Site Access Entry 1 – For service, ambulance and staff.
- > Monash Avenue/Site Access Entry 2 – Vivian Bullwinkel Entry/Drop-off
- > Monash Avenue/Site Access Entry 3 – Majorie Brislee Entry/Drop-off
- > Monash Avenue/Site Access Entry 4 – One way entry to the Specialist centre
- > Monash Avenue/Site Access Entry 5 – Main visitor staff entrance
- > Verdun Street/Site Access Entry 6 – Staff and service entrance
- > Verdun Street/Site Access Entry 7 – Staff and service entrance

Figure 5-1 Site Accesses

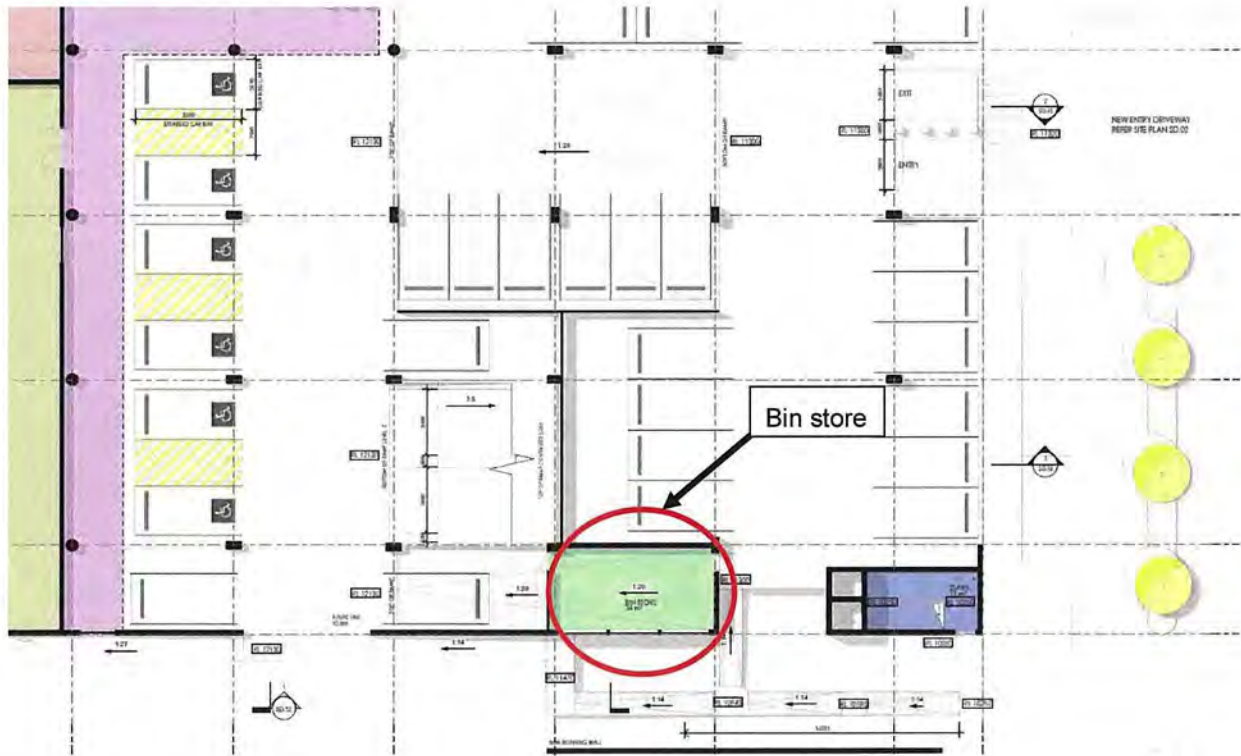


Source: Nearmap (2018)

5.3 Provision for Service Vehicles

The bin store is located on Level -3 as shown in **Figure 5-2**. Refuse collection is likely to occur at the dedicated collection area located near the proposed medical centre. During collection days, the bins would be moved to the collection area for collection and returned once they have been emptied.

Figure 5-2 Bin Store Location



Source: Silver Thomas Hanley (2018)

5.4 Parking

5.4.1 Car Parking Provision

This proposed project involves the removal of a number of existing car bays surrounding the proposed development site. Car bays will be removed on the southern end of the "AM Staff Parking" and around the store building. These bays will be replaced

As a component of the proposed development, three levels of parking will be constructed. The main access to the car park will be at level -3 which provide a small number of bays and ramps to the parking levels below. The three floors of underground parking provide a large volume of secure undercover parking.

The changes to parking volumes is outlined in **Table 5-1** below.

Table 5-1 Change in Parking Provision

Location of Parking	Change in Parking Bays
Existing AM staff parking/external bays	-42
Level -3	34
Level -1	110
Level 0	116
Proposed external bays	57
Net change in parking	275 Bays

5.4.2 Car Parking Cap

Under the City of Nedlands Town Planning Scheme 2 (TPS2), HPH is zoned Special Use Zone. While the parking requirements for "medical" uses are generally set at 1 parking bays per 4 beds, parking at HPH is restricted by the WAPC-imposed cap for the UWA-QEII of 1800 parking spaces.

HPH has numerous off street car parks spread out over the site. Details of the approximately 1,684 spaces are shown in **Table 5-2** and **Figure 5-3**.

The existing multi-storey car park in HPH operates on a swipe in and swipe out basis where all employees of HPH, tenants, and staff of the Medical and Specialist Centres are granted an access card.

Table 5-2 Hollywood Private Hospital Car Parking Details

Category	Approximate Supply
Medical Specialists	216
Patients and Visitors	213
HPH and Tenant workers	549
Multi storey (mixed supply)	706
Total	1,684 bays

Source: Hollywood Private Hospital

The current form of allocation provides dedicated parking to individual groups according to a permit system. Staff parking and public parking is maintained in separate areas, with the exception of the Main Parking multi-deck car park.

250 bays in a secure area are reserved for parking by afternoon shift and evening workers. Access to this parking area is not permitted during the morning. Providing dedicated shift worker parking allows the shifts to change over without creating an artificial demand on the hospital parking and allows staff to park conveniently. When the earlier shift leaves, the vacated bays are for the most part not filled. These bays do not contribute to peak traffic and therefore, its contribution is excluded from the parking cap.

With the exclusion of on-street bays along Monash Avenue and Verdun Street, catering/loading areas, informal parking areas, and the PM parking for afternoon/evening shift workers the supply which contributes to the parking cap for the entire HPH precinct is approximately 1,434 bays. The proposed development contributes 275 bays towards this total which results in a total parking provision of 1,709 which is within the parking cap set by the WAPC.

Figure 5-3 Existing car parking layout for Hollywood Private Hospital



Source: <http://www.hollywoodprivate.com.au>

There are free, time restricted (2 hour) on-street parking bays available on Verdun Street and Monash Avenue which is monitored and enforced by the City of Nedlands.

5.4.3 Bicycle Facilities and Parking

The pedestrian and cycling facilities described in **Section 4** of this report are generally adequate for present demand for walking and cycling, and no short term changes are therefore proposed. In future years, as demand for cycling grows, improvements to the on-street cycling environment may be desirable to encourage cyclists to use the road and reduce the potential for conflicts with pedestrians on the path network. However, this should form part of a new Council-wide Local Bike Plan.

Within the site, a covered pedestrian route is presently provided which links the main buildings. As future development occurs in the northern section of the site, the covered pedestrian route will be extended to provide access to/from the new buildings.

Cyclists will continue to be able to use the internal road network to circulate around the site and reach their individual building, as well as using the path network.

5.4.3.1 End-of-trip Facilities

As mentioned in the Hollywood Private Hospital Master Plan, existing end of trip facilities at the HPH include:

- > Over 500 lockers, currently used mainly by theatre and ward staff who get changed and/or shower before or after a shift
- > Approximately 25 showers, including a mixture of male, female and unisex facilities
- > Approximately 50 u-rail bicycle parking spaces
- > Hairdryers, irons and laundry service (for theatre staff)

The HPH Master Plan mentions that for future development progresses beyond 2018, further end of trip facilities shall be provided in existing and new buildings to cater for the increase in staff and expected increase in staff cycling to work. In response to this, the proposed development includes the following EOT facilities:

- > 11 lockers
- > 1 shared change room
- > 2 unisex showers
- > Male WC containing 1 toilet and 2 urinals
- > Female WC containing 3 toilets
- > 8 bicycle racks located outside the northwest entry

6 Analysis of Transport Network

6.1 Analysis Overview

6.1.1 Key Intersections

A SIDRA analysis has been undertaken for the following intersections to assess the potential impact of Site-generated traffic on the surrounding road network.

- > Smyth Road/Verdun Street (A)
- > Verdun Street/Site Access Entry 6 (B)
- > Verdun Street/Site Access Entry 7 (C)
- > Monash Avenue/Smyth Road (D)
- > Monash Avenue/Site Access Entry 5 (E)
- > Monash Avenue/Hampden Road (F)

Table 6-1 Key Intersections and Accesses



Source: Nearmap (2018)

Site Access entries 1, 2, 3, 4 and 5 were not assessed as there are no direct routes from these accesses to the proposed medical centre. Therefore the traffic generated by the proposed medical centre is unlikely to affect the operation at these accesses.

6.1.2 Assessment Years

As identified in the WAPC's *Transport Impact Assessment Guidelines: Individual Developments* (August 2016), it is recommended that, for analysis purposes, the appropriate assessment years include the year of full opening of the development and 10 years after full opening.

A growth rate of 2% per annum was applied to the 2018 background traffic to estimate the 2028 background traffic volumes.

6.1.3 Assessment Scenarios

6.1.3.1 Scenario 1: 2018 Assessment Year

The Scenario 1 assessment includes the traffic generated by the HPH precinct infrastructure upgrades in addition to the traffic growth up to 2018.

These previously completed upgrades entails the following elements:

- > Expansion of the Hollywood Clinic
- > Demolition of existing 30 bed ward facility
- > Construction of a new theatre block including kitchen and 60 bed ward facility (i.e. a net gain of 30 beds)
- > Construction of an additional floor on the existing multi-storey car park (approximately 187 additional parking bays, to be confirmed in detailed design phase)

A background traffic growth of 2% was also applied to estimate the 2018 background traffic.

6.1.3.2 Scenario 2: 2018 Assessment Year + Development

For the purpose of this assessment, it is assumed that the development opens in the year 2018. The development trip generation is added to the Scenario 1 assessment to estimate the traffic impact of the proposed medical centre on the surrounding road network.

6.1.3.3 Scenario 3: 2028 Assessment Year + Development

This assessment scenario includes the 10 year horizon assessment 2018 with the inclusion of the development generated traffic.

6.2 Development Trip Generation

Trip generation has been calculated for the Site, utilising the trip generation rates from the *Institute of transportation Engineering (ITE) "Trip Generation" 10th Ed.*

Table 6-2 shows the trip generation, **Table 6-3** shows the directional distribution of the traffic and **Table 6-4** presents the total potential trip generation of the proposed development for the full development buildout.

Table 6-2 Trip Generation Rates

Land Use	ITE Code/Source	AM Peak	PM Peak
Hospital	610	1.89 trip per bed	2.09 trips per bed
Medical Centre	720	5.62 trips per 100m ²	4.99 trips per 100m ²

Table 6-3 Directional Distribution

Land Use	AM Peak		PM Peak	
	In	Out	In	Out
Hospital	62%	38%	39%	61%
Medical Centre	71%	29%	30%	70%

Source: ITE "Trip Generation" 10th Ed

Table 6-4 Estimated Net Trip Generation of the Proposed Development

Land Use	AM Peak		PM Peak	
	In	Out	In	Out
Hospital*	84	34	39	91
Medical Centre	134	82	98	153
Total	218	116	137	244

* assuming 1 bed per 20m², the future hospital services area will have approximately 62 beds

The proposed redevelopment represents a two-way trip generation of approximately 334 vehicles in the AM peak and 381 vehicles in the PM peak hour for the full development buildout.

Note that the traffic generation does not include the reduction of trips as a result of the removal of the McCarthy Ward, Day Rehabilitation and the Frederick Bell Ward buildings. Therefore the traffic volumes for the proposed medical centre will likely be higher than expected which provides a robust assessment.

6.3 Development Traffic Distribution

The main routes of access to this proposed medical centre is via the following accesses;

- > Monash Avenue/Site Access Entry 5
- > Verdun Street/Site Access Entry 6
- > Verdun Street/Site Access Entry 7

Therefore inbound and outbound traffic will be directed to these accesses. **Figure 6-1**, shows the development trip distribution at these accesses.

Figure 6-1 Development Trip Distribution at the Site Accesses



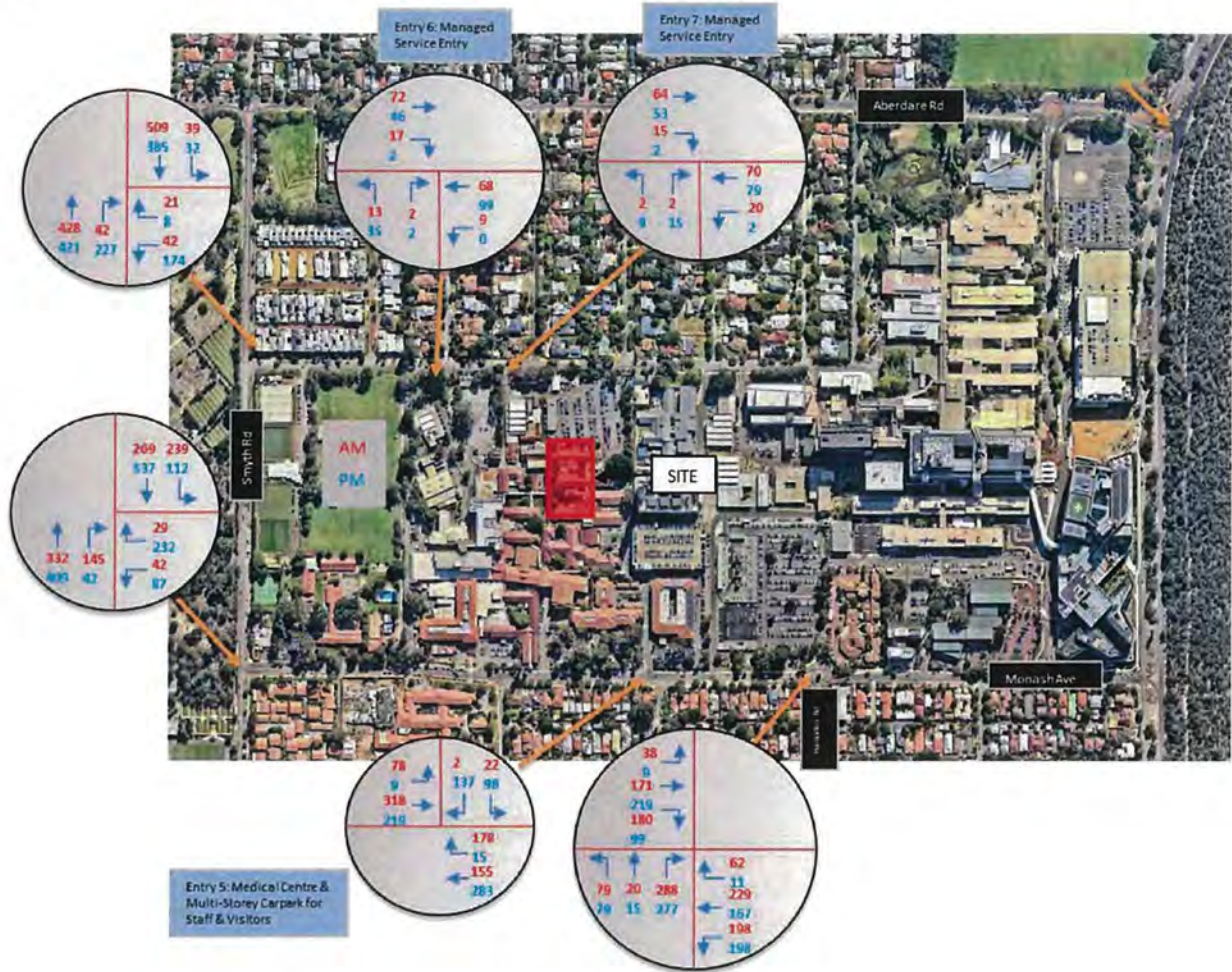
Source: Nearmap (2018)

Traffic distribution along the surrounding road network has been derived from the existing distribution flows of Monash Avenue, Smyth Road and Verdun Street sourced from on-site traffic counts. In addition, consideration has also been given to the expected origin and destination of each trip in the context of the surrounding area.

6.4 Background Traffic

Background with development traffic adopted for the assessment are shown in **Figure 6-2**.

Figure 6-2 2018 Assessment Year Weekday AM and PM Peak



6.5 Background and Development Traffic

Background with development traffic adopted for the assessment are shown in **Figure 6-3** and **Figure 6-4**.

Figure 6-3 2018 Assessment Year + Development – Weekday AM and PM Peak

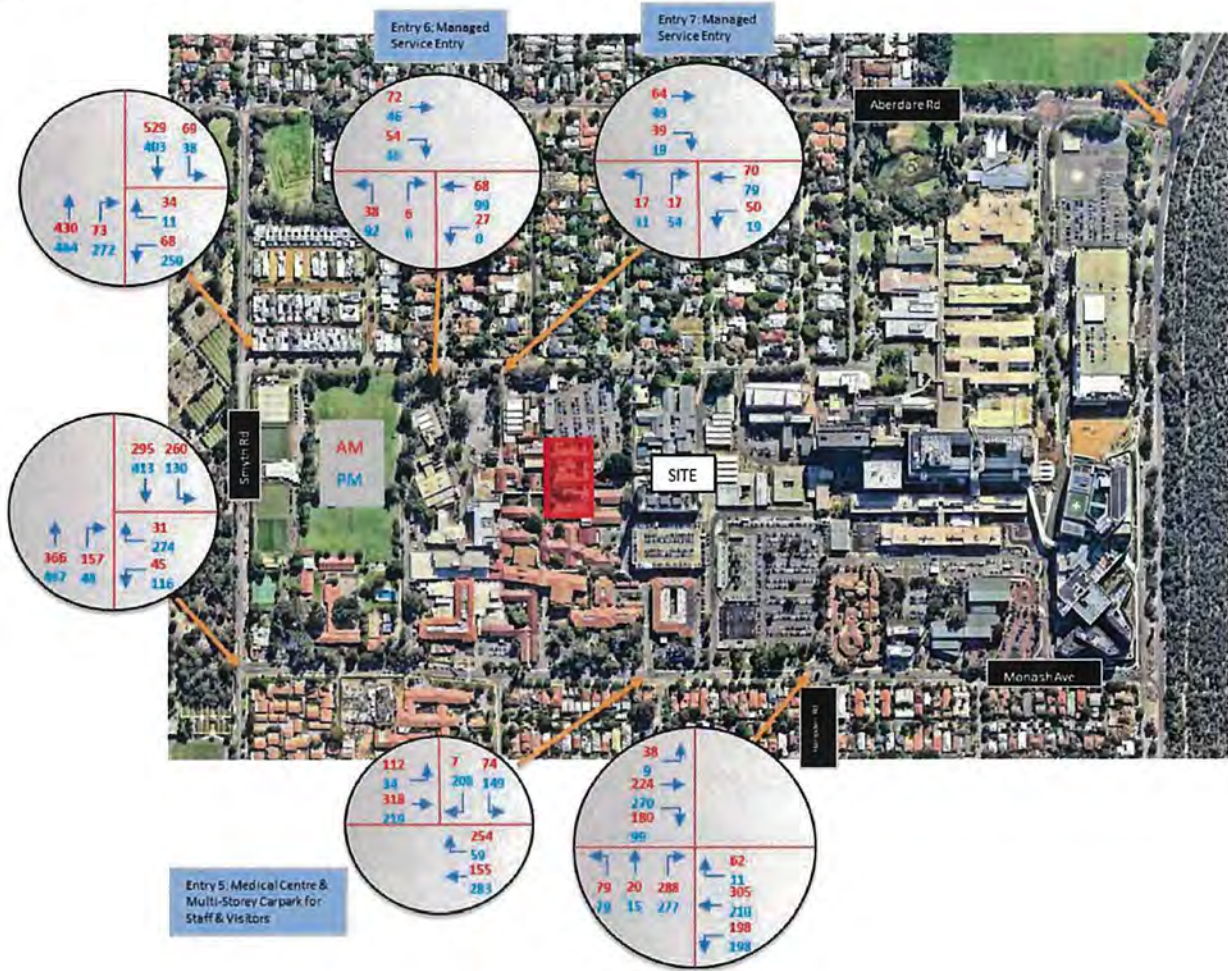
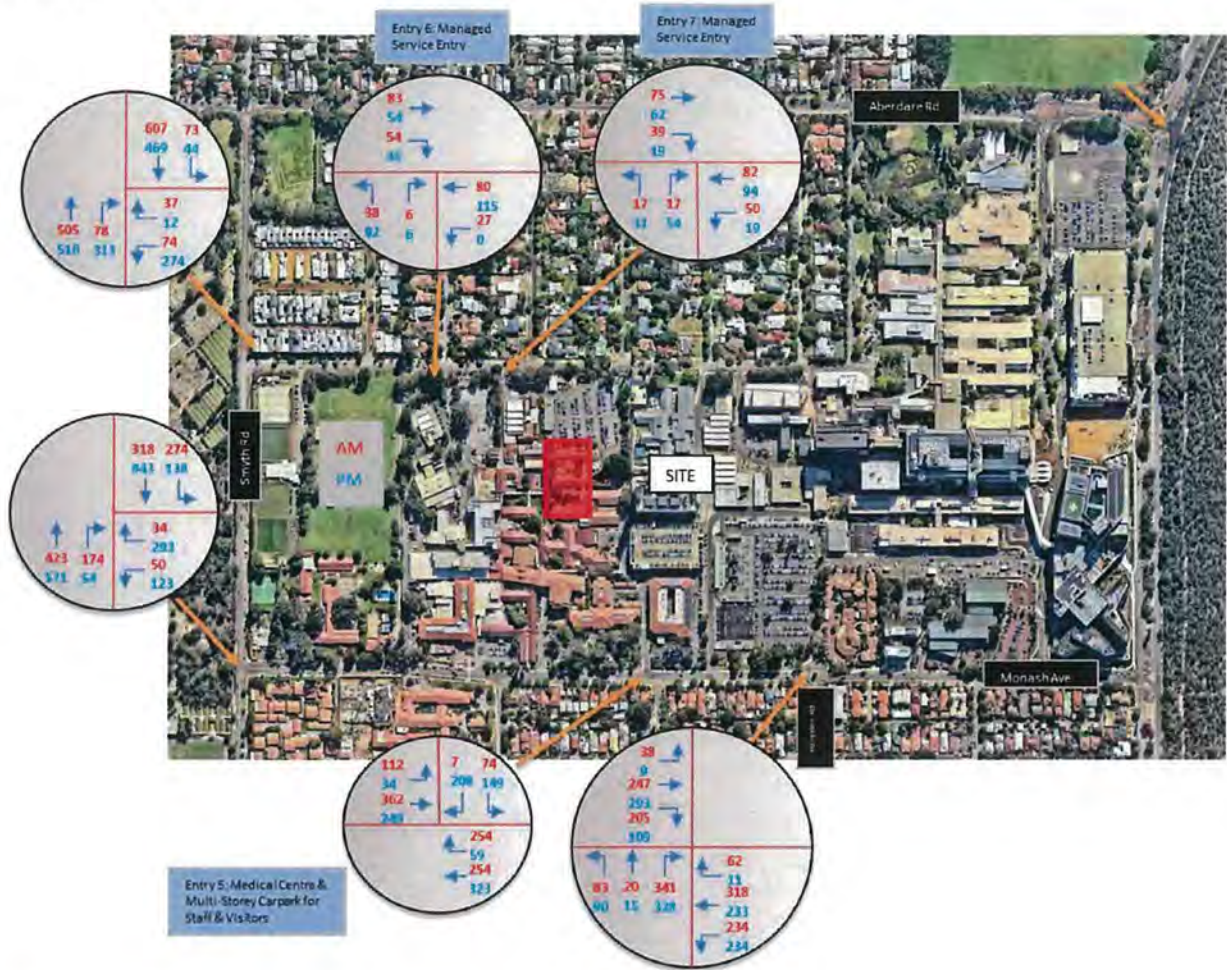


Figure 6-4 2028 Assessment Year + Development – Weekday AM and PM Peak



6.6 Intersection Performance

Analysis of the intersection performance has been carried out under the three scenarios, Scenario 1 (2018 assessment year), Scenario 2 (2018 assessment year + development) and Scenario 3 (2028 assessment year + development):

- > Monash Avenue/Hampden Road
- > Monash Avenue/Smyth Road
- > Smyth Road/Verdun Street
- > Monash Avenue/Site Access Entry 5
- > Verdun Street/Site Access Entry 6
- > Verdun Street/Site Access Entry 7

The identified intersections and accesses have been analysed for the proposed scenarios using the SIDRA analysis program. This program calculates the performance of intersections based on input parameters, including geometry and traffic volumes. As an output SIDRA provides values for the Degree of Saturation (DOS), queue lengths, delays, level of service, and 95th Percentile Queue. These parameters are defined as follows:

- > **Degree of Saturation (DOS):** is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The theoretical intersection capacity is exceeded for an un-signalized intersection where $DOS > 0.80$;
- > **95% Queue:** is the statistical estimate of the queue length up to or below which 95% of all observed queues would be expected;

- > **Average Delay:** is the average of all travel time delays for vehicles through the intersection. An unsignalised intersection can be considered to be operating at capacity where the average delay exceeds 40 seconds for any movement; and
- > **Level of Service (LOS):** is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. The different levels of service can generally be described as shown in **Table 6-5**.

Table 6-5 Level of Service (LoS) Performance Criteria

LOS	Description	Signalised Intersection	Unsignalised Intersection
A	Free-flow operations (best condition)	≤10 sec	≤10 sec
B	Reasonable free-flow operations	10-20 sec	10-15 sec
C	At or near free-flow operations	20-35 sec	15-25 sec
D	Decreasing free-flow levels	35-55 sec	25-35 sec
E	Operations at capacity	55-80 sec	35-50 sec
F	A breakdown in vehicular flow (worst condition)	≥80 sec	≥50 sec

A DOS exceeding these values indicates that the intersection is exceeding its practical capacity. Above these values, users of the intersections are likely to experience unsatisfactory queueing and delays during the peak hour periods. All SIDRA outputs referenced herein are included at **Appendix C**.

6.6.2 Scenario 1: 2018 Assessment Year

The performance of the critical intersections adjacent to the HPH for Scenario 1, is shown in **Table 6-6** to **Table 6-11** including the intersection layouts.

The intersection layout for the Monash Avenue/Hampden Road Intersection is shown in **Figure 6-5** below.

Figure 6-5 Monash Avenue/Hampden Road Intersection Layout

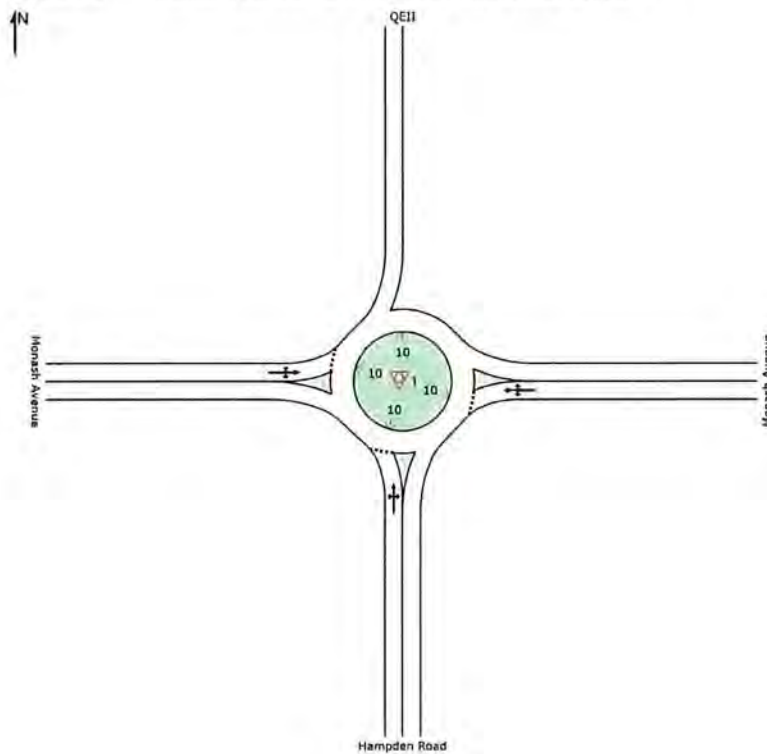


Table 6-6 Monash Avenue/Hampden Road Intersection Performance – Scenario 1

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Hampden Road (S)	L	0.404	4.8	A	20.2	0.336	3.8	A	15.7
	T	0.404	6.1	A	20.2	0.336	5.2	A	15.7
	R	0.404	7.7	A	20.2	0.336	6.7	A	15.7
Monash Avenue (E)	L	0.442	5.1	A	24.7	0.306	4.3	A	15.2
	T	0.442	5	A	24.7	0.306	4.3	A	15.2
	R	0.442	8.2	A	24.7	0.306	7.5	A	15.2
Monash Avenue (W)	L	0.439	6.8	A	22	0.346	6.1	A	16.1
	T	0.439	6.6	A	22	0.346	5.9	A	16.1
	R	0.439	9.9	A	22	0.346	9.1	A	16.1

From above it is noted that the intersection operates well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

The intersection layout for the Monash Avenue/Smyth Road Intersection is shown in **Figure 6-6** below.

Figure 6-6 Monash Avenue/Smyth Road Intersection Layout

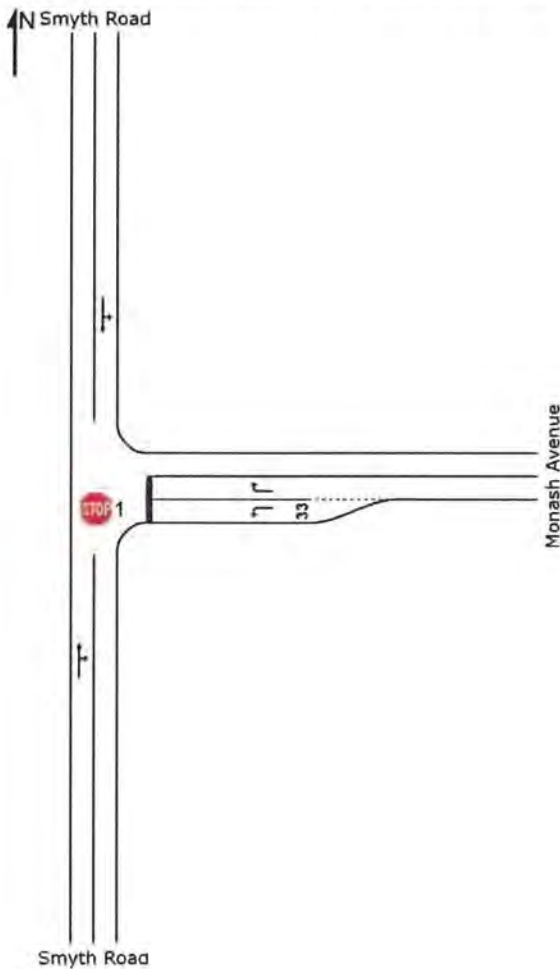


Table 6-7 Monash Avenue/Smyth Road Intersection Performance – Scenario 1

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Smyth Road (S)	T	0.322	1.8	A	13.4	0.256	0.4	A	3.7
	R	0.322	7.8	A	13.4	0.256	7.1	A	3.7
Monash Avenue (E)	L	0.04	8.8	A	1.1	0.09	9.3	A	2.6
	R	0.066	13.4	B	1.6	0.556	19.2	C	21.8
Smyth Road (N)	L	0.276	4.6	A	0	0.241	4.6	A	0
	T	0.276	0	A	0	0.241	0	A	0

From above it is noted that the intersection operates well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

The intersection layout for the Verdun Street/Smyth Road Intersection is shown in **Figure 6-7** below.

Figure 6-7 Verdun Street/Smyth Road Intersection Layout

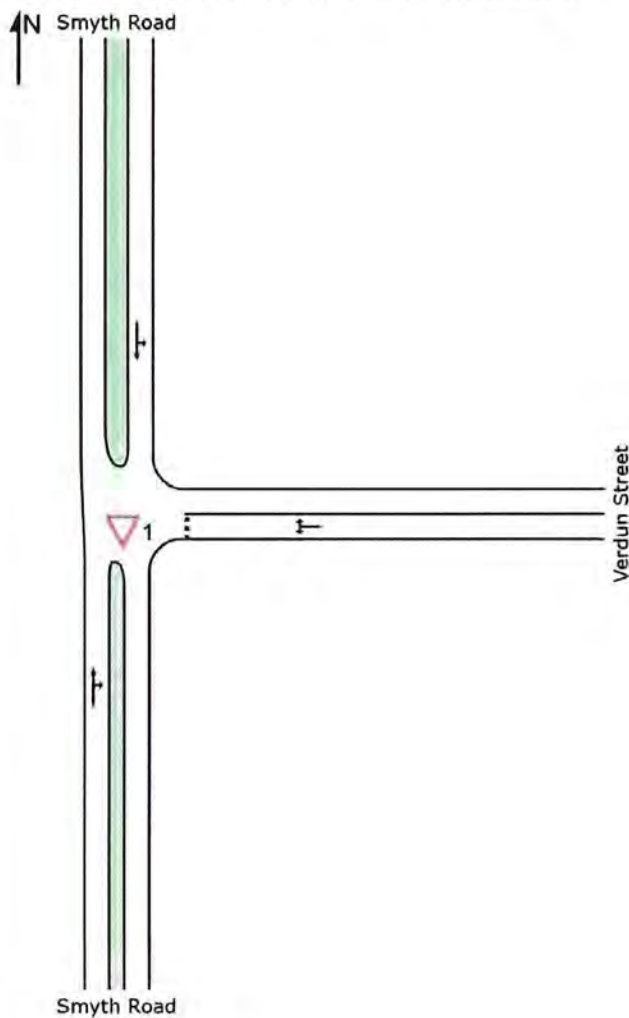


Table 6-8 Verdun Street/Smyth Road Intersection Performance – Scenario 1

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Smyth Road (S)	T	0.271	0.6	A	4.5	0.426	1.9	A	22.8
	R	0.271	8	A	4.5	0.426	7.6	A	22.8
Verdun Street (E)	L	0.15	7.7	A	3.7	0.236	6.9	A	6.9
	R	0.15	19.7	C	3.7	0.236	25	D	6.9
Smyth Road (N)	L	0.291	4.6	A	0	0.222	4.6	A	0
	T	0.291	0	A	0	0.222	0	A	0

From above it is noted that the intersection operates well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

The intersection layout for the Monash Avenue/Site Access Entry 5 Intersection is shown in Figure 6-8 below.

Figure 6-8 Monash Avenue/Site Access Entry 5 Intersection Layout

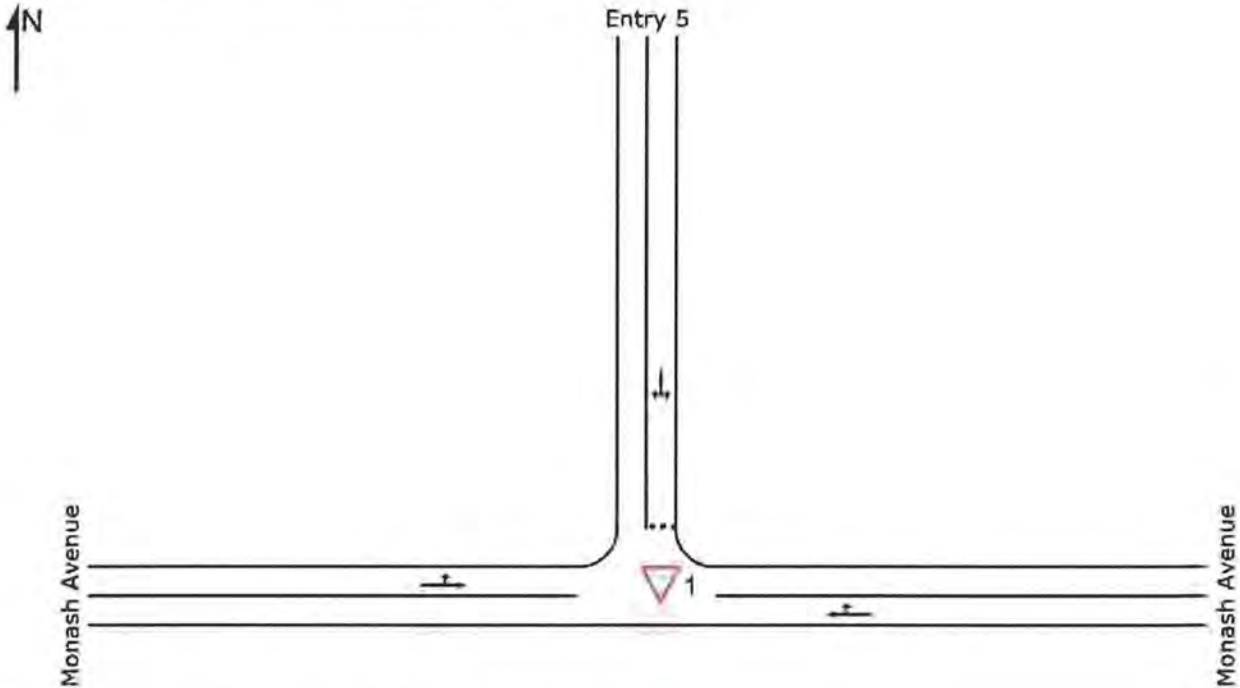


Table 6-9 Monash Avenue/Site Access Entry 5 Intersection Performance – Scenario 1

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Monash Avenue (E)	T	0.23	1.5	A	8.7	0.16	0.1	A	0.9
	R	0.23	6.3	A	8.7	0.16	5.4	A	0.9
Site Access 5 (N)	L	0.027	1.5	A	0.7	0.343	1.6	A	11.3
	R	0.027	6.8	A	0.7	0.343	6.4	A	11.3
Monash Avenue (W)	L	0.21	4.6	A	0	0.121	4.6	A	0
	T	0.21	0	A	0	0.121	0	A	0

From above it is noted that the intersection operates well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

The intersection layout for the Verdun Street/Site Access Entry 6 Intersection is shown in **Figure 6-9** below.

Figure 6-9 Verdun Street/Site Access Entry 6 Intersection Layout

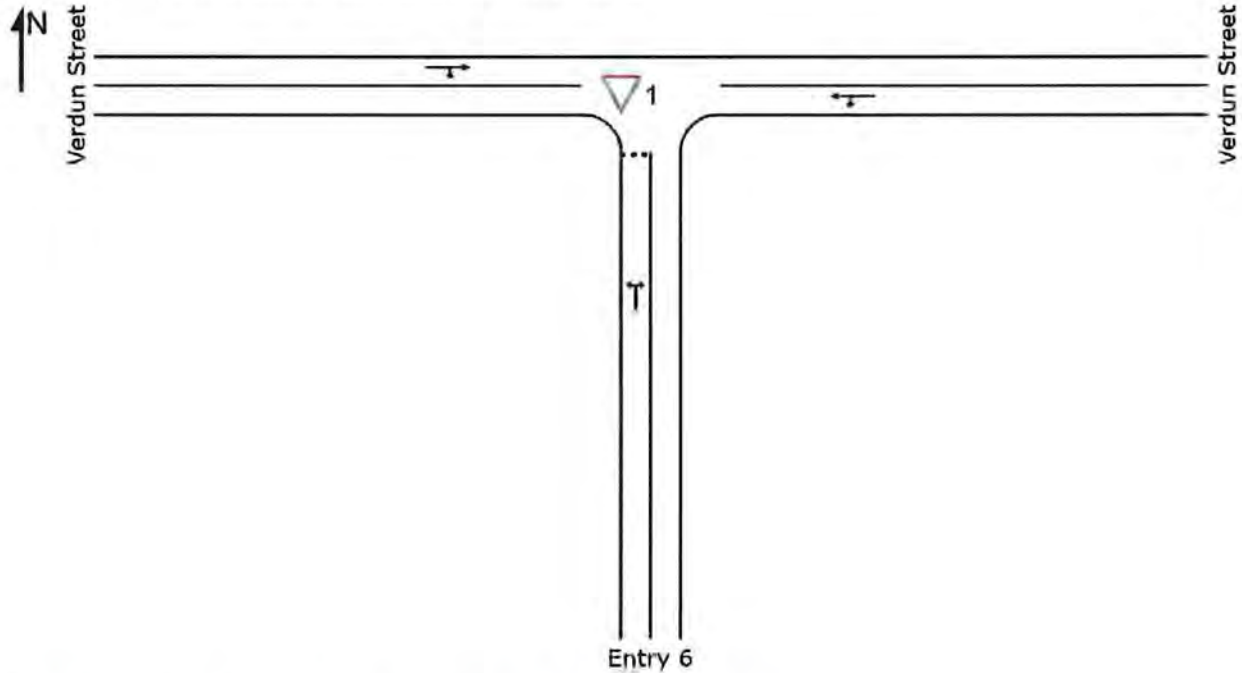


Table 6-10 Verdun Street/Site Access Entry 6 Intersection Performance – Scenario 1

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Site Access 6 (S)	L	0.012	0.2	A	0.3	0.029	0.4	A	0.8
	R	0.012	1.5	A	0.3	0.029	1.4	A	0.8
Verdun Street (E)	L	0.041	4.6	A	0	0.053	4.6	A	0
	T	0.041	0	A	0	0.053	0	A	0
Verdun Street (W)	T	0.048	0.1	A	0.7	0.026	0	A	0.1
	R	0.048	4.8	A	0.7	0.026	4.8	A	0.1

From above it is noted that the intersection operates well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

The intersection layout for the Verdun Street/Site Access Entry 7 Intersection is shown in **Figure 6-10** below.

Figure 6-10 Verdun Street/Site Access Entry 7 Intersection Layout

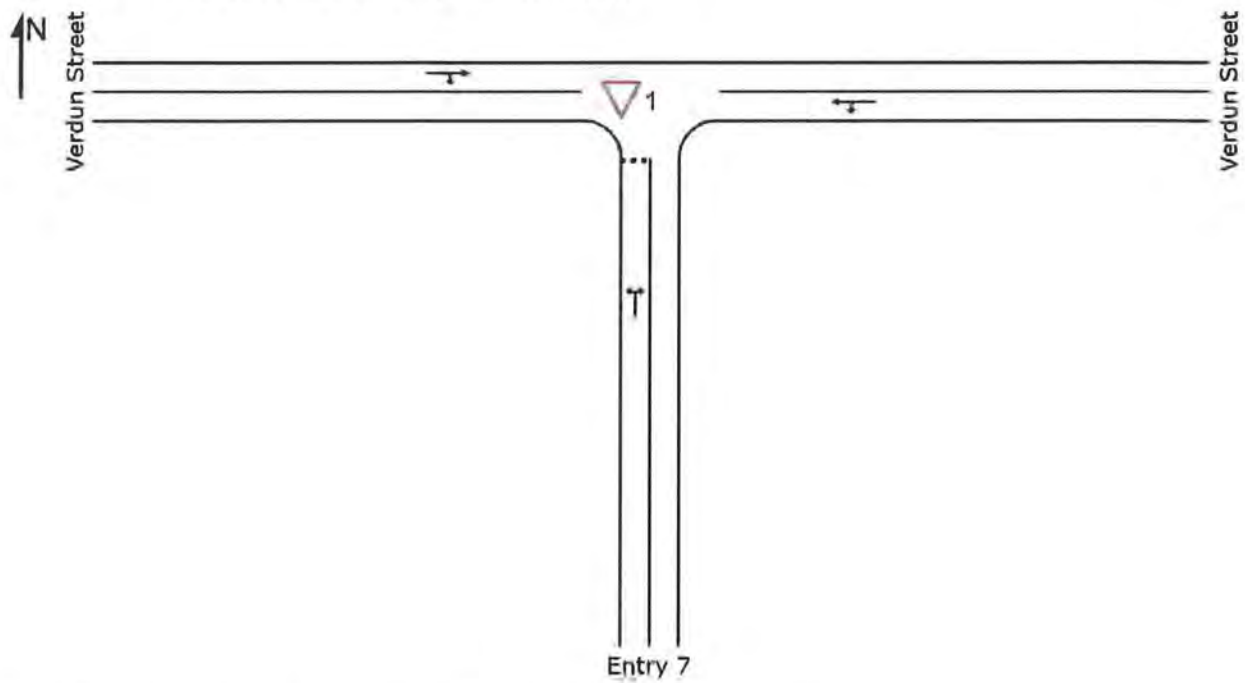


Table 6-11 Verdun Street/Site Access Entry 7 Intersection Performance – Scenario 1

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Site Access 7 (S)	L	0.004	0.3	A	0.1	0.024	0.3	A	0.6
	R	0.004	1.4	A	0.1	0.024	1.3	A	0.6
Verdun Street (E)	L	0.048	4.6	A	0	0.043	4.6	A	0
	T	0.048	0	A	0	0.043	0	A	0
Verdun Street (W)	T	0.043	0.1	A	0.6	0.029	0	A	0.1
	R	0.043	4.8	A	0.6	0.029	4.8	A	0.1

From above it is noted that the intersection operates well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

6.6.3 Scenario 2: 2018 Assessment Year + Development

The performance of the critical intersections and accesses adjacent to the HPH for Scenario 2 is shown in Table 6-12 to Table 6-17.

Table 6-12 Monash Avenue/Hampden Road Intersection Performance – Scenario 2

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Hampden Road (S)	L	0.439	5.5	A	22.3	0.355	4.2	A	16.7
	T	0.439	6.8	A	22.3	0.355	5.5	A	16.7
	R	0.439	8.4	A	22.3	0.355	7.1	A	16.7
Monash Avenue (E)	L	0.508	5.2	A	30.8	0.339	4.3	A	17.6
	T	0.508	5.1	A	30.8	0.339	4.3	A	17.6
	R	0.508	8.3	A	30.8	0.339	7.5	A	17.6
Monash Avenue (W)	L	0.501	7.2	A	27.8	0.4	6.2	A	19.7
	T	0.501	7	A	27.8	0.4	6	A	19.7
	R	0.501	10.3	B	27.8	0.4	9.2	A	19.7

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

Table 6-13 Monash Avenue/Smyth Road Intersection Performance – Scenario 2

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Smyth Road (S)	T	0.362	2.3	A	17.1	0.314	0.6	A	5.7
	R	0.362	8.5	A	17.1	0.314	8.2	A	5.7
Monash Avenue (E)	L	0.044	9	A	1.2	0.132	9.9	A	3.8
	R	0.08	14.7	B	1.9	0.882	44	E	59.2
Smyth Road (N)	L	0.301	4.6	A	0	0.291	4.6	A	0
	T	0.301	0	A	0	0.291	0	A	0

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

Table 6-14 Verdun Street/Smyth Road Intersection Performance – Scenario 2

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Smyth Road (S)	T	0.311	1.2	A	9	0.497	2.6	A	32.3
	R	0.311	8.7	A	9	0.497	8.4	A	32.3
Verdun Street (E)	L	0.271	8.9	A	7.3	0.361	7.9	A	13.3
	R	0.271	24	C	7.3	0.361	35	D	13.3
Smyth Road (N)	L	0.319	4.6	A	0	0.235	4.6	A	0
	T	0.319	0	A	0	0.235	0	A	0

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods, with queuing and long delays are unlikely to occur. Therefore, no modification to the intersection geometry is required at this access location.

Table 6-15 Monash Avenue/Site Access Entry 5 Intersection Performance – Scenario 2

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Monash Avenue (E)	T	0.301	1.9	A	12.3	0.192	0.3	A	3.4
	R	0.301	6.7	A	12.3	0.192	5.6	A	3.4
Site Access 5 (N)	L	0.096	1.8	A	2.5	0.557	3.5	A	26.9
	R	0.096	8.9	A	2.5	0.557	10	A	26.9
Monash Avenue (W)	L	0.229	4.6	A	0	0.134	4.6	A	0
	T	0.229	0	A	0	0.134	0	A	0

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods, with queuing and long delays are unlikely to occur. Therefore, no modification to the intersection geometry is required at this access location.

Table 6-16 Verdun Street/Site Access Entry 6 Intersection Performance – Scenario 2

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Site Access 6 (S)	T	0.036	0.3	A	1	0.077	0.4	A	2.2
	R	0.036	1.8	A	1	0.077	1.7	A	2.2
Verdun Street (E)	L	0.051	4.6	A	0	0.053	4.6	A	0
	R	0.051	0	A	0	0.053	0	A	0
Verdun Street (W)	L	0.071	0.2	A	2	0.046	0.2	A	1.3
	T	0.071	4.8	A	2	0.046	4.9	A	1.3

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods, with queuing and long delays are unlikely to occur. Therefore, no modification to the intersection geometry is required at this access location.

Table 6-17 Verdun Street/Site Access Entry 7 Intersection Performance – Scenario 2

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Site Access 7 (S)	T	0.034	0.3	A	0.8	0.086	0.3	A	2.2
	R	0.034	1.8	A	0.8	0.086	1.6	A	2.2
Verdun Street (E)	L	0.064	4.6	A	0	0.052	4.6	A	0
	R	0.064	0	A	0	0.052	0	A	0
Verdun Street (W)	L	0.058	0.2	A	1.5	0.04	0.1	A	0.8
	T	0.058	4.9	A	1.5	0.04	4.8	A	0.8

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods, with queuing and long delays are unlikely to occur. Therefore, no modification to the intersection geometry is required at this access location.

6.6.4 Scenario 3: 2028 Assessment Year + Development

The performance of the critical intersections and accesses adjacent to the HPH for the 2028 scenario with development traffic is shown in **Table 6-18** to **Table 6-23**.

Table 6-18 Monash Ave/Hampden Road Intersection Performance – Scenario 3

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Hampden Road (S)	L	0.517	6.3	A	30.1	0.422	4.5	A	21.3
	T	0.517	7.5	A	30.1	0.422	5.8	A	21.3
	R	0.517	9.2	A	30.1	0.422	7.4	A	21.3
Monash Avenue (E)	L	0.571	5.5	A	37.3	0.391	4.4	A	21.7
	T	0.571	5.5	A	37.3	0.391	4.4	A	21.7
	R	0.571	8.6	A	37.3	0.391	7.6	A	21.7
Monash Avenue (W)	L	0.591	9.2	A	40.1	0.46	6.8	A	23.8
	T	0.591	9	A	40.1	0.46	6.5	A	23.8
	R	0.591	12.2	B	40.1	0.46	9.8	A	23.8

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

Table 6-19 Monash Avenue/Smyth Road Intersection Performance – Scenario 3

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Smyth Road (S)	T	0.432	3.2	A	24.2	0.366	0.9	A	8.3
	R	0.432	9.9	A	24.2	0.366	10.4	B	8.3
Monash Avenue (E)	L	0.052	9.3	A	1.4	0.152	11	B	4.3
	R	0.108	17.3	C	2.5	1.236	258.4	F	310.1
Smyth Road (N)	L	0.341	4.6	A	0	0.332	5.6	A	0
	T	0.341	0	A	0	0.332	0	A	0

It is noted that the right from Monash Avenue to Smyth Road is anticipated to operate at Level of Service F during the Weekday PM Peak Hour, as a result of the growth in background traffic. In order to reduce the delay for this right turn movement, a roundabout could be constructed, generally within the existing road reserve, to improve the operation of this intersection. The need for this intervention is not considered to be as a result of the HPH hospital expansion, but rather as a consequence of planned growth within the QEII Medical Centre Precinct, surrounding residential areas, and bypass movements by regional traffic.

Table 6-20 Verdun Street/Smyth Road Intersection Performance – Scenario 3

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Smyth Road (S)	T	0.368	1.7	A	12.6	0.59	4	A	47.7
	R	0.368	10.2	B	12.6	0.59	10.1	B	47.7
Verdun Street (E)	L	0.39	11.9	B	11.1	0.469	9.8	A	19.7
	R	0.39	35.2	E	11.1	0.469	53.4	F	19.7
Smyth Road (N)	L	0.362	4.6	A	0	0.273	4.6	A	0
	T	0.362	0	A	0	0.273	0	A	0

It is noted that the right turn out from Verdun Street to Smyth Road is anticipated to operate at Level of Service F during the Weekday PM Peak Hour. However, the right turn volumes out of Verdun Street are low and the delays are not major (the threshold for LOS E to LOS F is a delay of above 50 seconds). Therefore, no modification to the intersection geometry is required at this location.

Table 6-21 Monash Avenue/ Site Access Entry 5 Intersection Performance - Scenario 3

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Monash Avenue (E)	T	0.321	2.3	A	14.4	0.215	0.3	A	3.7
	R	0.321	7.2	A	14.4	0.215	5.8	A	3.7
Site Access 5 (N)	L	0.102	2.1	A	2.7	0.613	4.7	A	31
	R	0.102	10.1	B	2.7	0.613	12.5	B	31
Monash Avenue (W)	L	0.252	4.6	A	0	0.15	4.6	A	0
	T	0.252	0	A	0	0.15	0	A	0

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

Table 6-22 Verdun Street/Site Access Entry 6 Intersection Performance - Scenario 3

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Site Access 6 (S)	T	0.036	0.3	A	1	0.079	0.5	A	2.2
	R	0.036	2	A	1	0.079	1.9	A	2.2
Verdun Street (E)	L	0.057	4.6	A	0	0.061	4.6	A	0
	R	0.057	0	A	0	0.061	0	A	0
Verdun Street (W)	L	0.077	0.2	A	2.1	0.051	0.2	A	1.4
	T	0.077	4.9	A	2.1	0.051	4.9	A	1.4

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.



Table 6-23 Verdun Street/Site Access Entry 7 Intersection Performance - Scenario 3

Intersection Approach		Weekday AM Peak Hour				Weekday PM Peak Hour			
		DOS	Delay (s)	LOS	95% Queue (m)	DOS	Delay (s)	LOS	95% Queue (m)
Site Access 7 (S)	T	0.034	5.9	A	0.9	0.088	0.4	A	2.2
	R	0.034	6.8	A	0.9	0.088	1.8	A	2.2
Verdun Street (E)	L	0.07	5.5	A	0	0.06	4.6	A	0
	R	0.07	0	A	0	0.06	0	A	0
Verdun Street (W)	L	0.064	0.2	A	1.6	0.045	0.1	A	0.8
	T	0.064	5.9	A	1.6	0.045	4.9	A	0.8

From above it is noted that the intersection continues to operate well within acceptable capacity limits during both peak hour periods. Therefore, no modification to the intersection geometry is required at this location.

7 Site-Specific Issues

7.1 Crash Data

Assessment of the crash data for the five year period between 2013 and 2017 has been undertaken for Monash Avenue (between Smyth Road and Winthrop Ave) and Verdun Street (between Smyth Road and Burwood Street).

The crash database separates Monash Avenue into two sections which has been designated as Monash Avenue West (between Smyth Street and east of Clifton Street) and Monash Avenue East (between west of Hampden Road and Winthrop Avenue). Seventy six crashes were recorded for the Monash Avenue section and four crashes were recorded for the Verdun Street section. Summaries of the crash data analysis are presented in **Table 7-1**, **Table 7-2** and **Table 7-3**.

Table 7-1 Monash Avenue (West) Crash Statistics 2013-2017

Type of Crash	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	0	0	1	7	2	10
Right Angle	0	1	1	1	3	6
Sideswipe Same Direction	0	0	0	2	1	3
Hit Pedestrian	0	0	1	0	0	1
Other Crashes	0	0	0	1	5	6
Total	0	1	3	11	11	26

Table 7-2 Monash Avenue (East) Crash Statistics 2013-2017

Type of Crash	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	0	1	6	13	10	30
Right Angle	0	0	0	4	4	8
Right Turn Thru	0	0	0	1	1	2
Sideswipe Same Direction	0	0	0	0	2	2
Non Collision	0	0	1	1	1	3
Hit Object	0	0	0	1	0	1
Other Crashes	0	0	0	0	4	4
Total	0	1	7	20	22	50

In summary,

- > No fatalities were recorded.
- > Two crashes that required hospital admittance were recorded:
 - One crash involved conflict with a motorcycle and a panel van leaving a driveway (RUM Code: 43).
 - One crash involved conflict between three cars, two motorcycles and three bicycles at a roundabout (RUM Codes: 12, 10, 12, 77 and 85).
- > Ten crashes that required medical treatment but not hospital admittance were recorded:
 - Seven crashes were classified as “Rear End” crashes, which involved one through vehicle colliding with a through vehicle in front (RUM Code: 31 – Same Lane Rear End).
 - One crash was classified as a “Right Angle” crash involving a motorcycle leaving a driveway and colliding with a vehicle traveling down Monash Ave (RUM Code: 47 – Leaving Driveway).

- One crash was classified as a "Hit Pedestrian" crash involving a vehicle making a right turn and colliding with a pedestrian crossing the road (RUM Code: 98 Pedest Other).
- One crash was classified as a "Non Collision" crash with a motorcycle swerving to avoid a vehicle on a roundabout (RUM Code: 77 – Loss of Control: Right Turn Int).
- > Thirty major property damage crashes were recorded.
 - Twenty crashes were classified as "Rear End" crashes (RUM Codes: 31 – Rear End, 32 – Left Rear, 33 – Right Rear and 61 – Parked).
 - Five crashes were classified as "Right Angle" crashes (RUM Codes: 10 – Intersection Other, 12 – Right-Thru, 14 – Thru-Right, 15 – Right-Right and 47 – Leaving Driveway).
- > Thirty three minor property damage crashes were recorded.
 - Twelve crashes were classified as "Rear End" crashes (RUM Codes: 31 – Rear End, 32 – Left Rear, 33 – Right-Rear and 61 – On Path Parked).
 - Seven crashes were classified as "Right Angle" crashes (RUM Codes: 10 – Intersection Other, 12 – Right – Thru, 14 – Thru-Right, 47 – Leaving Driveway).
 - Three crashes were classified as "Sideswipe Same Direction" crashes (RUM Codes: 34 – Same Lane U-Turn, 42 – Leaving Parking)
 - One crash was classified as a "Right Turn Thru" crash (RUM Code: 22 – Thru-Right).
 - One crash was classified as a "Non Collision" crash (RUM Code: 85 – Out of Control on Cway).
 - Nine crashes were classified as "Other Crashes" (RUM Codes: 40 – Manoeuvring Other, 44 – Leaving Parking, 45 – Reversing in Traffic, 96 – Parked Car Ran Away).
- > It is noted that crashes classified "Rear End" appear over-represented compared to the network average along this section of road. The crash numbers indicate that a road safety investigation of this section of road may be justified.
- > Future hospital developments are expected to increase the pedestrian and vehicle movements along Monash Avenue, therefore it is recommended that a Road Safety Audit be undertaken in the future to ensure any safety concerns have been identified and mitigated, and to ensure the risk of crash occurrence is reduced.

Table 7-3 Verdun Street (between Smyth Road and Burwood Street) Crash Statistics 2008-2012

Type of Crash	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	0	0	1	0	0	1
Head On	0	0	1	0	0	1
Right Turn Thru	0	0	1	0	0	1
Hit Object	0	0	0	1	0	1
Total	0	0	3	1	0	4

In summary,

- > Almost all of the recorded crashes required medical treatment but not hospital admittance, the single crash that didn't resulted in major property damage. This is significantly above the expected severity for a road of this type.
- > Three crashes required medical treatment but not hospital admittance were recorded.
 - One crash was classified as a "Rear End" crash (RUM Code: 33 – Same Lane Right Rear).
 - One crash was classified as a "Right Turn Thru" crash (RUM Code: 22 – Thru-Right).
 - One crash was classified as a "Head On" crash (RUM Code: 21 – S/Swipe / Head On).
- > One major property damage crash was recorded.
 - One crash was classified as a "Hit Object" crash (RUM Code: 72 – Left off Cway Into Object/Vehicle).

7.2 Other Site-Specific Issues

There were no additional site-specific issues identified for this development.

8 Summary

This Transport Impact Assessment outlines the transport aspects of the proposed development focusing on traffic operations, loading vehicle operations, access and car parking. Provided also are walking, cycling, and public transport considerations.

This statement has been prepared in accordance with the WAPC *Transport Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016)*.

The following conclusions are regarding the proposed development:

- > The proposed development consists of a medical centre with 33 consulting rooms, a section reserved for future hospital services and 3 levels of car parking.
- > There is currently good footpath connectivity to a number of local bus stops from the Site. The bus stops cater for a number of local bus services including routes to Fremantle, Claremont, Subiaco, Morley and the CBD.
- > Cycling infrastructure within the surrounding area of the Site is average with disjointed paths and a lack of high quality connections. However, the design of the Winthrop Avenue Bike Facility is currently underway, which will greatly benefit cycling connection to HPH once completed.
- > The proposed development will have a trip generation of approximately 334 vehicles in the AM peak and 381 vehicles in the PM peak hour.
- > Site access to the consulting centre will use the existing accesses into the Hollywood Private Hospital Precinct. Current access arrangements will remain generally unchanged in all future scenarios, with the bulk of the vehicle traffic generated by HPH entering and exiting via Monash Avenue.
- > A SIDRA assessment was conducted for the key intersections and accesses located near the Site. Almost all intersections operate within acceptable capacity limits during both peak hour periods. Overall the traffic impacts of the proposed development is unlikely to have a significant effect on the function of the surrounding road network.
- > The proposed parking provision for the medical centre is within the parking cap imposed by the WAPC for the Hollywood Private Hospital.

APPENDIX

A

WAPC TRANSPORT STATEMENT CHECKLIST
FOR DEVELOPMENT

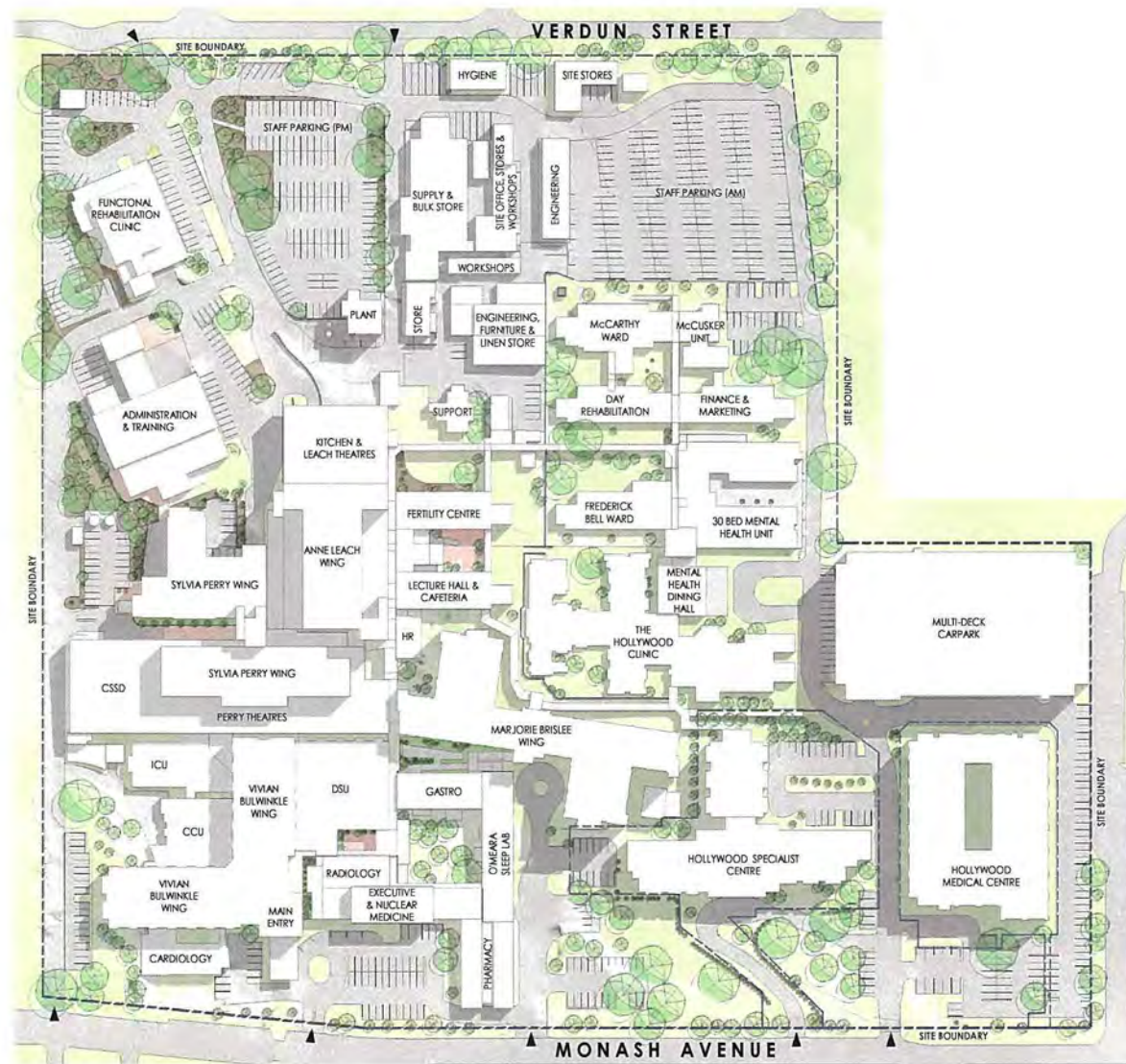
WAPC Checklist for a Transport Statement, Individual Development, August 2016

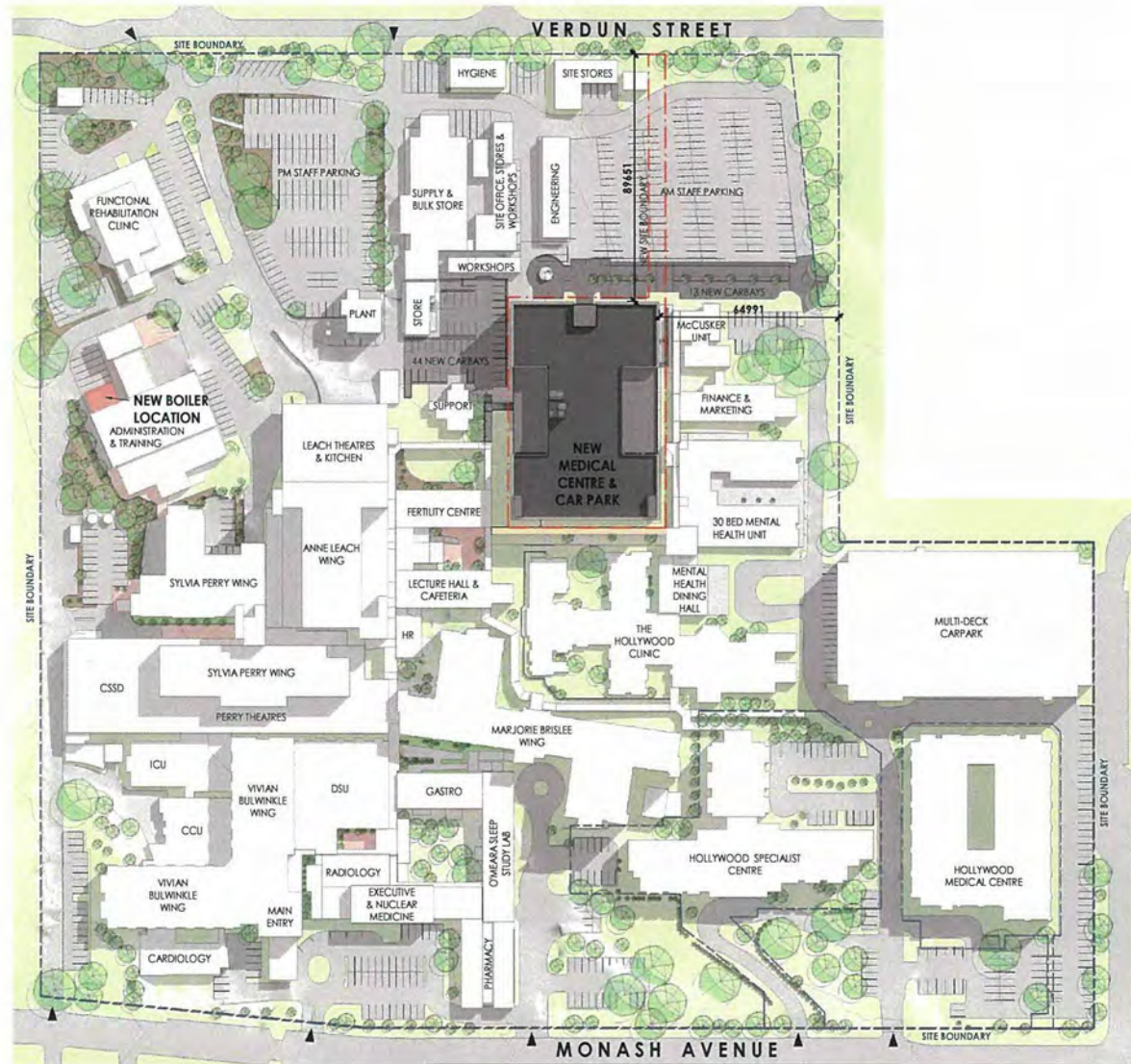
Item	Status	Comments/Proposals
Proposed subdivision		
proposed land use	Section 5	
existing land uses	Section 1	
context with surrounds	Section 1	
Vehicular access and parking		
access arrangements	Section 5	
public, private, disabled parking set down / pick up	N/A	
Service vehicles (non-residential)		
access arrangements	N/A	
on/off-site loading facilities	Section 5	
Service vehicles (residential)		
Rubbish collection and emergency vehicle access	N/A	
Hours of operation (non-residential only)		
	N/A	
Traffic volumes		
daily or peak traffic volumes	Section 2	
type of vehicles (e.g. cars, trucks)	Section 2	
Traffic management on frontage streets		
	Section 2	
Public transport access		
nearest bus/train routes	Section 3	
nearest bus stops/train stations	Section 3	
pedestrian/cycle links to bus stops/train station	Section 3	
Pedestrian access/facilities		
existing pedestrian facilities within the development (if any)	Section 4	
proposed pedestrian facilities within development	Section 4	
existing pedestrian facilities on surrounding roads	Section 4	
proposals to improve pedestrian access	Section 4	
Cycle access/facilities		
existing cycle facilities within the development (if any)	Section 4	
proposed cycle facilities within the development	Section 4	
existing cycle facilities on surrounding roads	Section 4	
proposals to improve cycle access	Section 4	
Site specific issues		
	Section 7	
Safety issues		
identify issues	Section 7	
remedial measures	N/A	

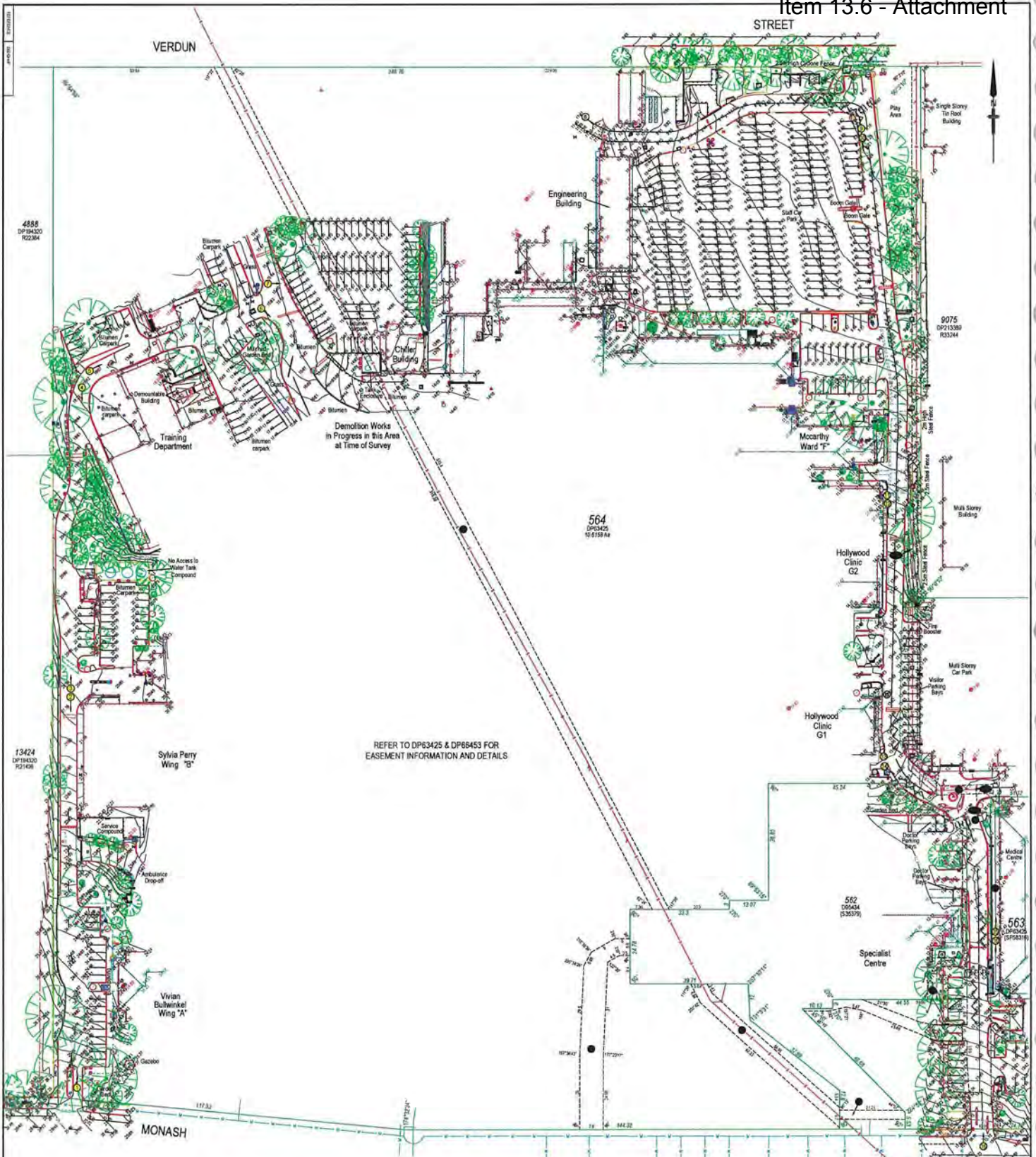
APPENDIX

B

PROPOSED DEVELOPMENT LAYOUT PLANS







LEGEND OF FEATURES

- BOUNDARY
- CONTOUR INTERVAL OF 0.25m
- BUILDING STRUCTURE
- ROOF / EAVE LINE
- GUTTER
- RETAINING WALL
- WALL
- FENCE
- BRICK PAVING
- SLAB PATH
- CONCRETE EDGE
- EDGE OF RESURFACING
- ROAD SOLID LINE MARK
- ROAD DASHED LINE MARK
- ROAD CENTRELINE
- KERB
- FOOTPATH
- GARDEN BED
- BUSH LINE
- TOP OF BANK
- BOTTOM OF BANK
- LINE OF LEVELS
- DOOR
- WINDOW
- WATER PIPE
- SEWER PIPE

- NATURAL SURFACE LEVEL
- FLOOR LEVEL
- BITUMEN LEVEL
- TOP OF WALL LEVEL
- TOP OF FENCE LEVEL
- ELECTRICAL CABLE BOX
- ELECTRICAL LIGHT POLE
- ELECTRICAL POLE
- POWER DOME
- FIRE SERVICE VALVE
- STOP VALVE
- STORMWATER GRATE
- TAP
- HYDRANT PILLAR
- HYDRANT GROUND
- RETIC CONTROL VALVE
- WATER METER
- GAS VALVE
- UNKNOWN HATCH
- SEWER INSPECTION OUTLET
- SEWER INSPECTION SHAFT
- TELESTRUT
- COMMUNICATION PIT
- BOLLARD
- SIGN
- LITTER BIN
- BUS STOP
- TICKET MACHINE
- TREE CANOPY



WATER & SEWER DATA SHOWN ON THIS PLAN IS DERIVED FROM SUPPLIED WATER CORPORATION INFORMATION SHEETS AND IS COMPILED AS BEST-FIT MODEL. BROWN McALLISTER SURVEYORS CANNOT GUARANTEE THE ACCURACY OF THIS DATA.

NO.	DESCRIPTION	DATE	BY	CHECKED
1	APPROVED FOR ISSUE			
2	REVISIONS			

FEATURE SURVEY OF PORTION OF LOT 564 ON DP63425 - HOLLYWOOD PRIVATE HOSPITAL No 101 MONASH AVENUE, NEDLANDS

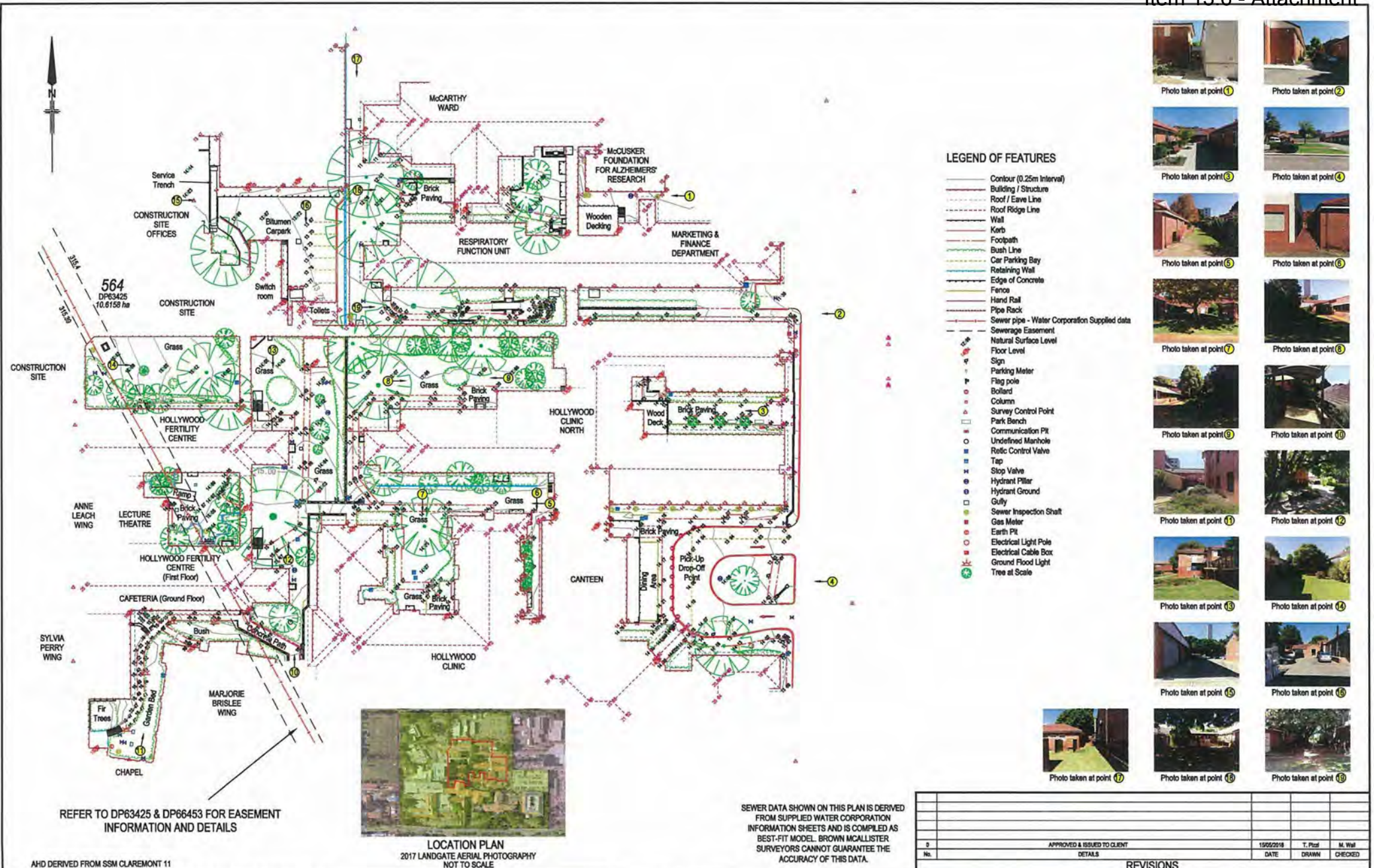
Client: RAMSAY HEALTH CA- SILVER THOMAS HANLEY HEALTH ARCHITECTURE

DATUM
HORIZONTAL - PCGM
VERTICAL - AHD

SCALE 1:600

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 Email: admin@brownmccallisters.com.au | Tel: (08) 8396 9649
 43 Broadway, Northport, Western Australia 6019 | Fax: (08) 8396 9677



LEGEND OF FEATURES

- Contour (0.25m Interval)
- Building / Structure
- Roof / Eave Line
- Roof Ridge Line
- Wall
- Kerb
- Footpath
- Bush Line
- Car Parking Bay
- Retaining Wall
- Edge of Concrete
- Fence
- Hand Rail
- Pipe Rack
- Sewer pipe - Water Corporation Supplied data
- Sewerage Easement
- Natural Surface Level
- Floor Level
- Sign
- Parking Meter
- Flag pole
- Bollard
- Column
- Survey Control Point
- Park Bench
- Communication Pit
- Undefined Manhole
- Relief Control Valve
- Tap
- Stop Valve
- Hydrant Pitter
- Hydrant Ground
- Gully
- Sewer Inspection Shaft
- Gas Meter
- Earth Pit
- Electrical Light Pole
- Electrical Cable Box
- Ground Floor Light
- Tree at Scale



REFER TO DP63425 & DP66453 FOR EASEMENT INFORMATION AND DETAILS



SEWER DATA SHOWN ON THIS PLAN IS DERIVED FROM SUPPLIED WATER CORPORATION INFORMATION SHEETS AND IS COMPILED AS BEST-FIT MODEL. BROWN McALLISTER SURVEYORS CANNOT GUARANTEE THE ACCURACY OF THIS DATA.

APPROVED & ISSUED TO CLIENT		19/05/2018	T. Post	M. Wall
DETAILS		DATE	DRAWN	CHECKED

FEATURE SURVEY OF PORTION OF LOT 564 ON DP63425 - HOLLYWOOD PRIVATE HOSPITAL No 101 MONASH AVENUE, NEDLANDS

Client: RAMSAY HEALTH C/- SILVER THOMAS HANLEY HEALTH ARCHITECTURE

DATUM
 HORIZONTAL - PCG94
 VERTICAL - AHD

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SCALE 1:500 @ A2

0 5 10 15 20 25

All distances in metres unless stated otherwise

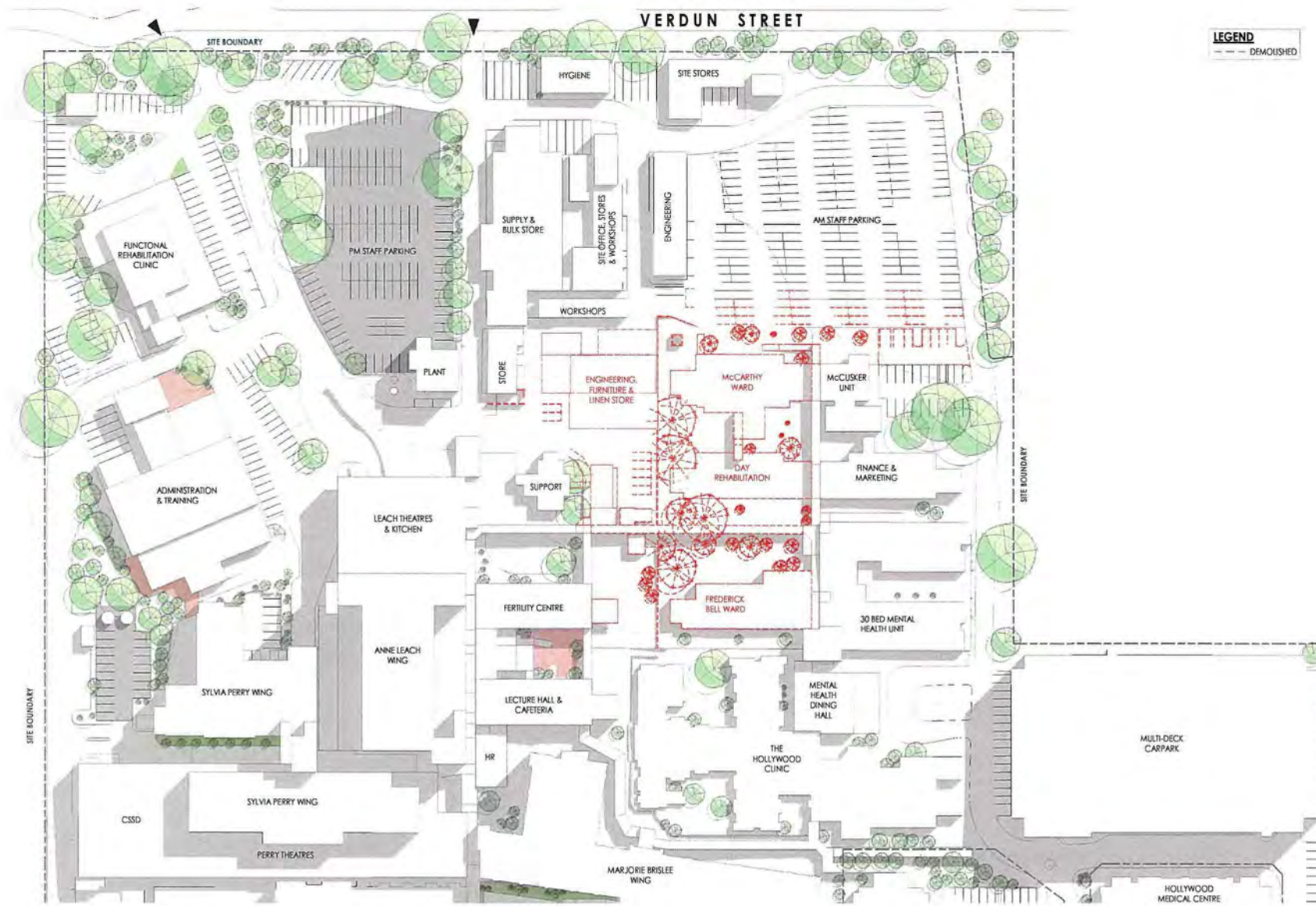
THE BOUNDARIES WERE NOT RE-ESTABLISHED AS PART OF THIS SURVEY THEREFORE THIS PLAN DOES NOT GUARANTEE THEIR ACCURACY

FIELD INSPECTION IS RECOMMENDED FOR LOCATION OF SERVICES PRIOR TO ANY EXCAVATION

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 43 Broadway, Nedlands, Western Australia, 6009 Fax: (08) 9385 9677

SHEET	A2
SURVEYED	M. Wall - 11/05/2018
FIELD NOTES	
DRAWN	T. Post - 19/05/2018
CHECKED	
REFERENCE	06043-45F



DEMOLITION PLAN
HPH MEDICAL CENTRE AND CARPARK



FLOOR PLAN - LEVEL -3 PARKING
 HPH MEDICAL CENTRE AND CARPARK

High-3 Storage Car Bay	3
Level -3 Storage Car Bay	34
TOTAL INTERNAL CAR BAYS:	240
External Car Bays	37
TOTAL CAR BAYS:	317

Scale 1 : 100 @ B1
 Date 02/07/18
 SCALE BAR 1:100

Project No.	Sheet No.	Revision
3077	SD.04	



FLOOR PLAN - LEVEL -1.5 MEZZANINE
HPH MEDICAL CENTRE AND CARPARK

Scale 1 : 100 @ B1

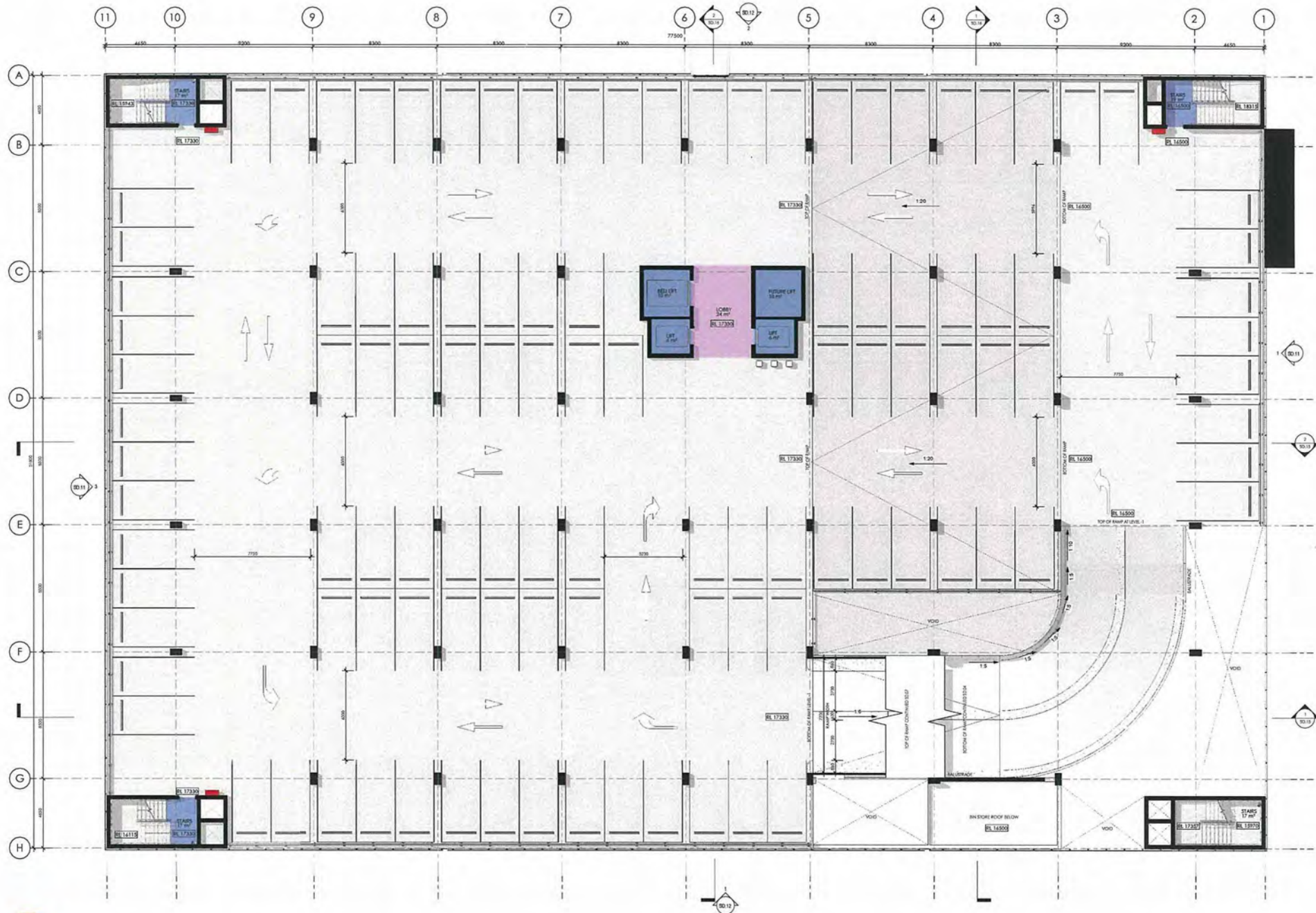
Date 02/07/18

Project No. 3077

Sheet No. SD.05

Revision





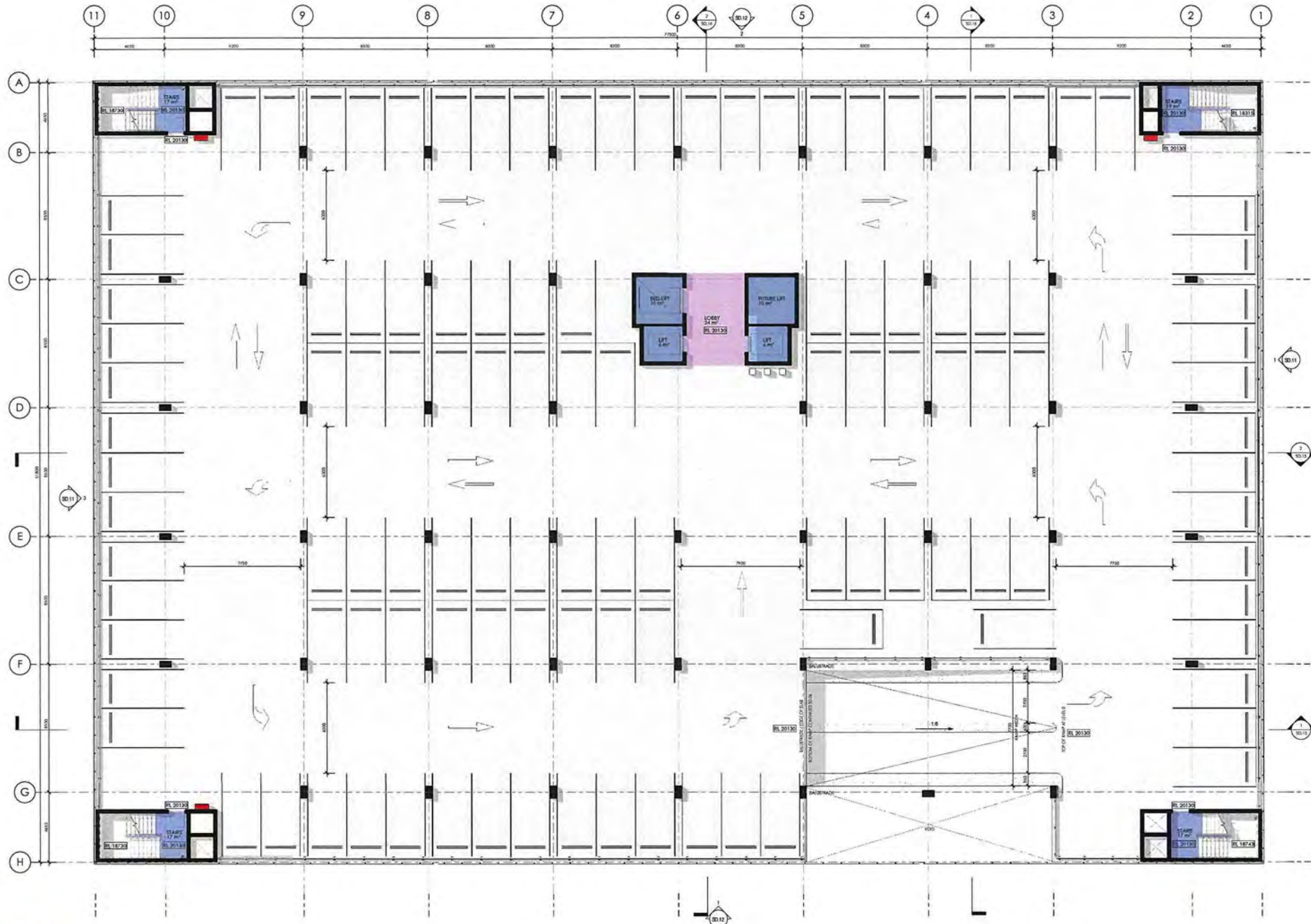
FLOOR PLAN - LEVEL -1 PARKING
HPH MEDICAL CENTRE AND CARPARK

LEVEL -1 STAIRS/LOBBY AREA	110
TOTAL INTERNAL CAR BAYS	260

Scale 1 : 100 @ B1
 Date 02/07/18
 SCALE BAR 1:100

Project No. 3077
 Sheet No. SD.06

Revision



FLOOR PLAN - LEVEL 0 PARKING
 HPH MEDICAL CENTRE AND CARPARK

LEVEL 0 CAR BAYS:	114
TOTAL INTERNAL CAR BAYS:	150

Scale 1 : 100 @ B1
 SCA 1 : 100

Date 02/07/18

Project No. 3077

Sheet No. SD.07

Revision





FLOOR PLAN - LEVEL 1 MEDICAL CENTRE & GASTRO
 HPH MEDICAL CENTRE AND CARPARK

Scale 1 : 100 @ B1
 Date 02/07/18
 SCALE BAR 1:100

Project No.	Sheet No.	Revision
3077	SD.08	





FLOOR PLAN - LEVEL 2 CONSULTING SUITES
HPH MEDICAL CENTRE AND CARPARK

Scale 1 : 100 @ B1

Date 02/07/18

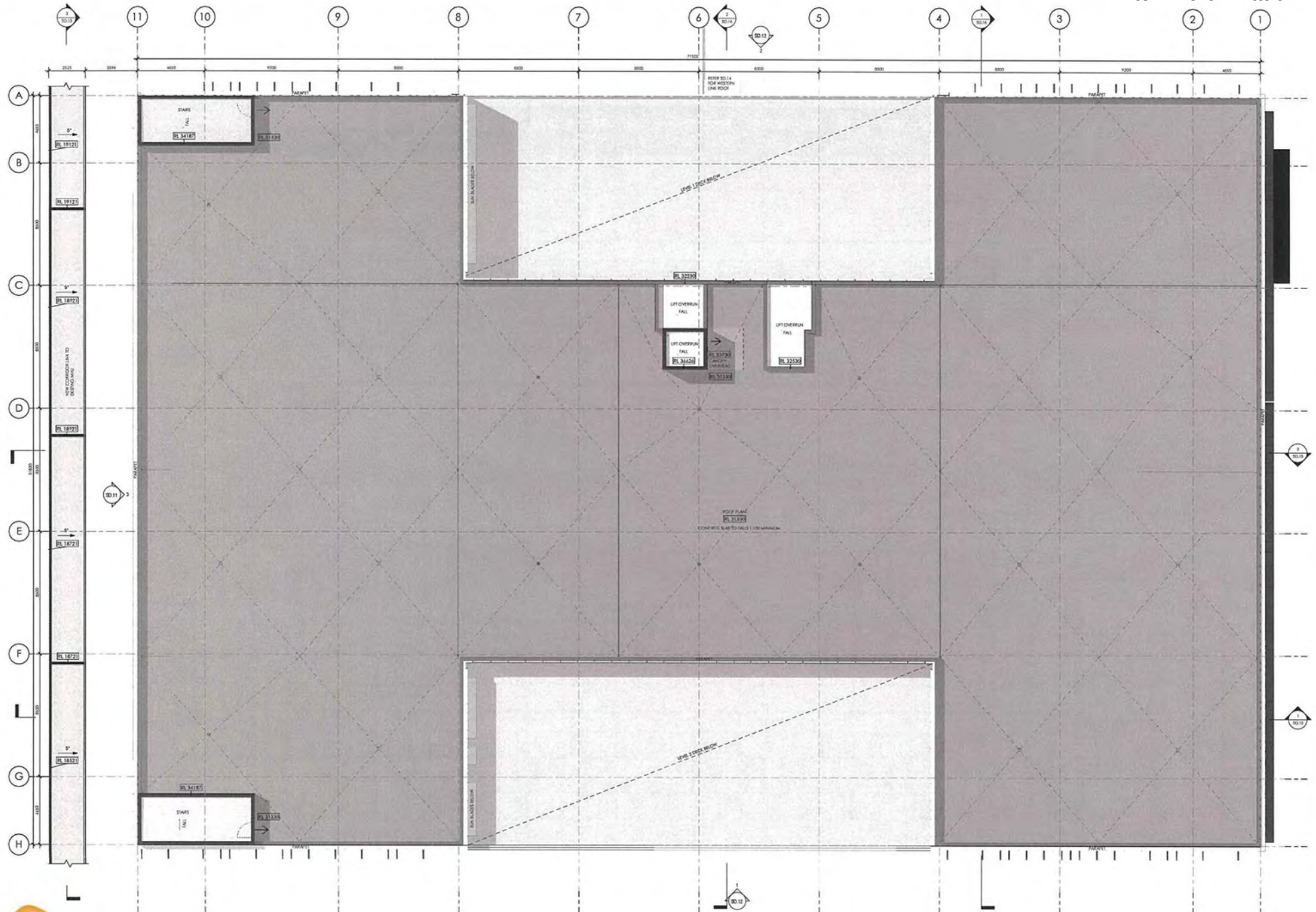
Project No. 3077

Sheet No. SD.09

Revision

SCA 1:100



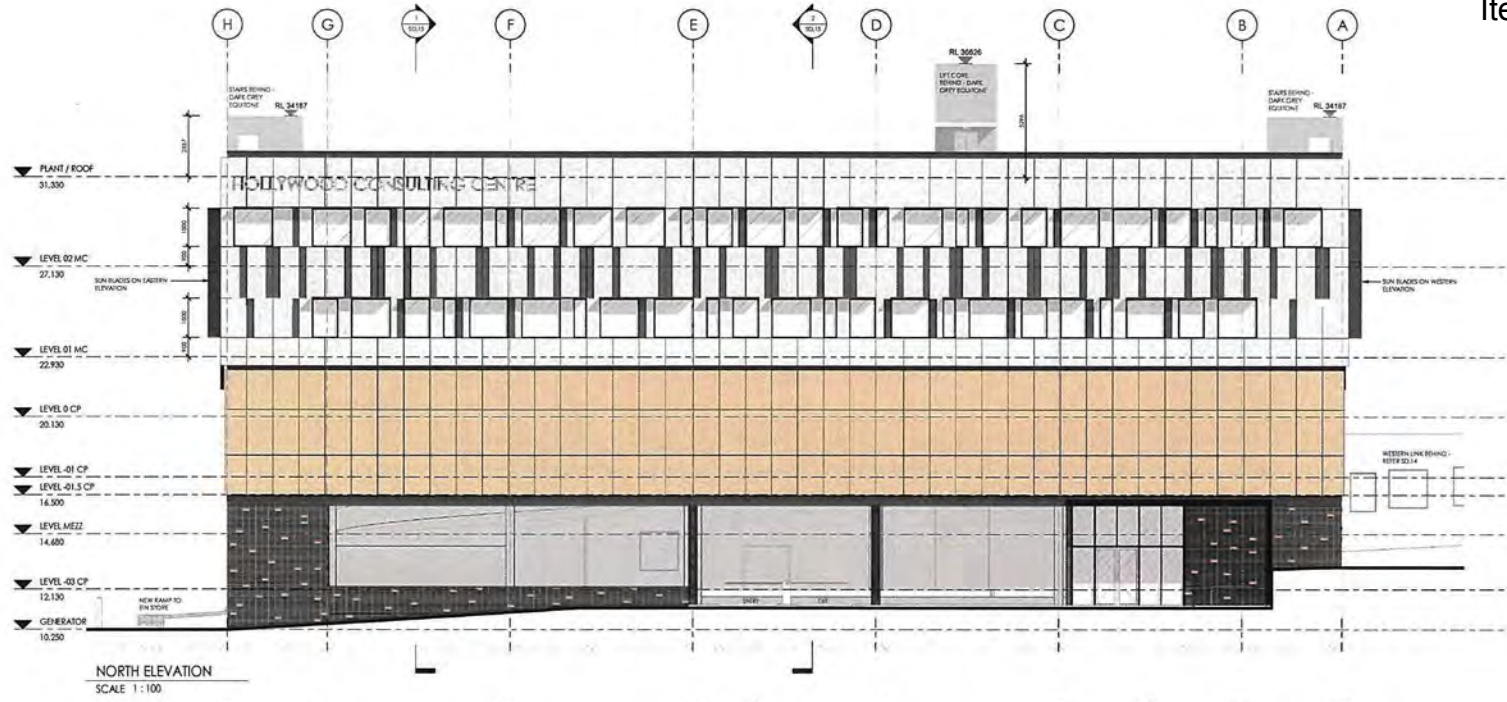


ROOF PLAN
HPH MEDICAL CENTRE AND CARPARK

Scale 1 : 100 @ B1 Date 02/07/18
SCALE BAR 1:100

Project No.	Sheet No.	Revision
3077	SD.10	

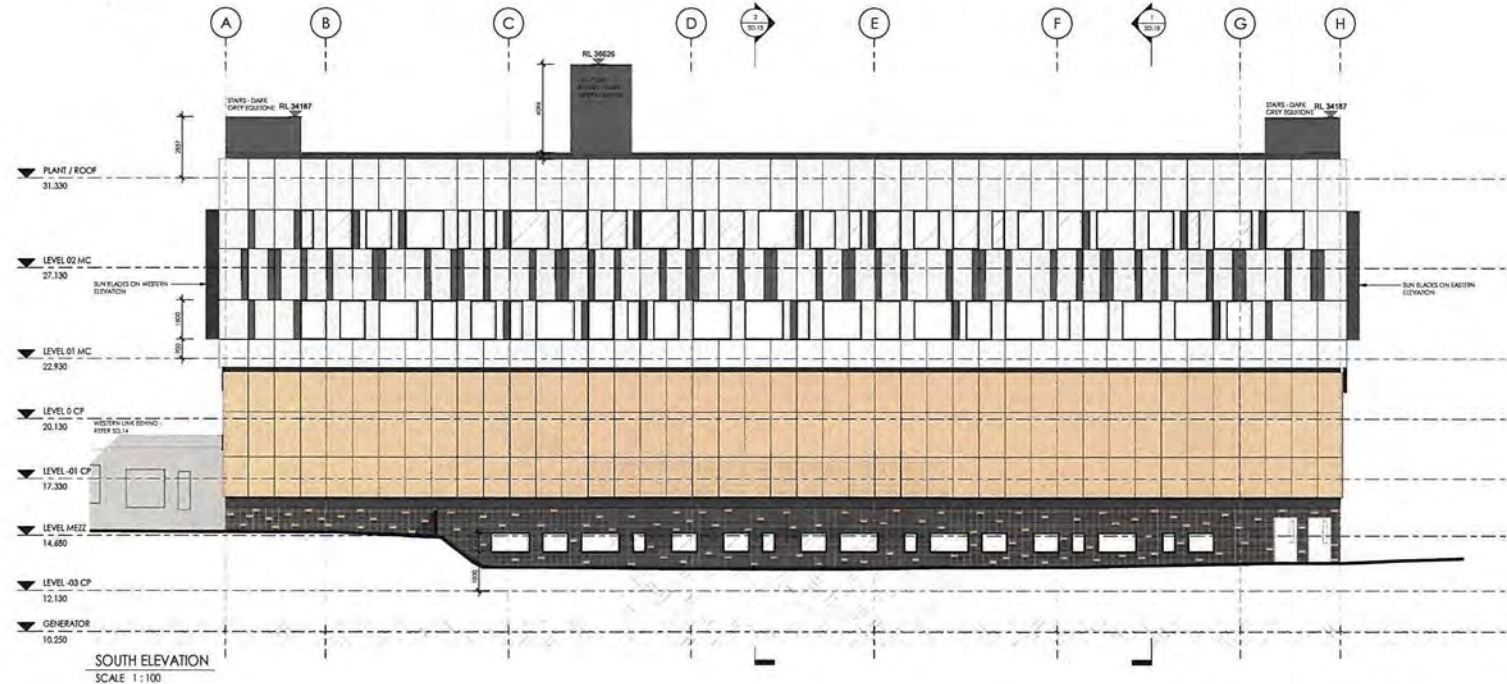




FINISHES LEGEND

- PERFORATED METAL SCREEN - POWDERCOATED COPPER COLOUR
- PERFORATED METAL SCREEN - POWDERCOATED CHARCOAL COLOUR
- EQUIGRA - OFF WHITE
- EQUIGRA - DARK GREY
- BRICE EDGE BOARD - DARK GREY BRICK INTERSPERSED WITH RED BRICK
- GLAZING - TRANSPARENT
- GLAZING - TINTED
- GLAZING - COLOURBRCK
- WINDOW FRAMES - POWDERCOATED BLACK
- ARCADIA JIFF SUN BLADES - NICKEL/ANT MATT
- BANCROFT SUN BLADES - NICKEL/ANT MATT
- PARADE - EXTRUDED ALUMINIUM CLADDING IN SILVER SLIP
- NORTHERN HAVELI SUNPROOF - EXTRUDED ALUMINIUM CLADDING IN BLACK
- HOLLANDS CONSULTING CENTRE - BRONZE SLIP

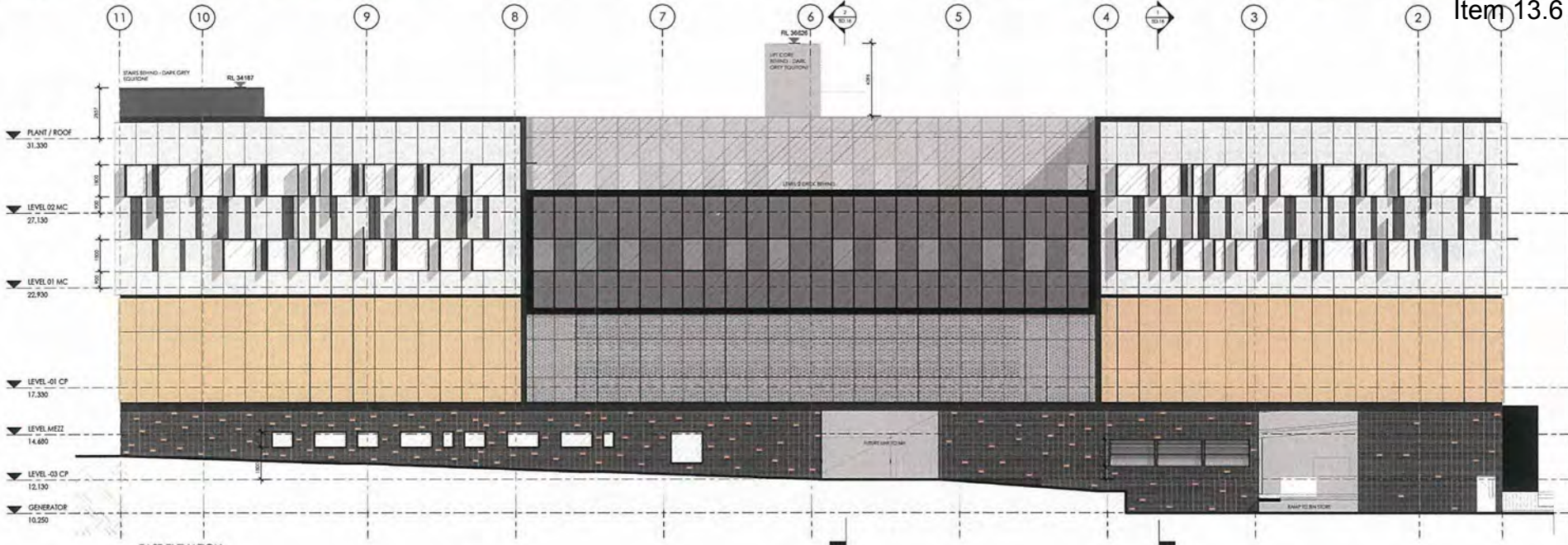
NOTE:
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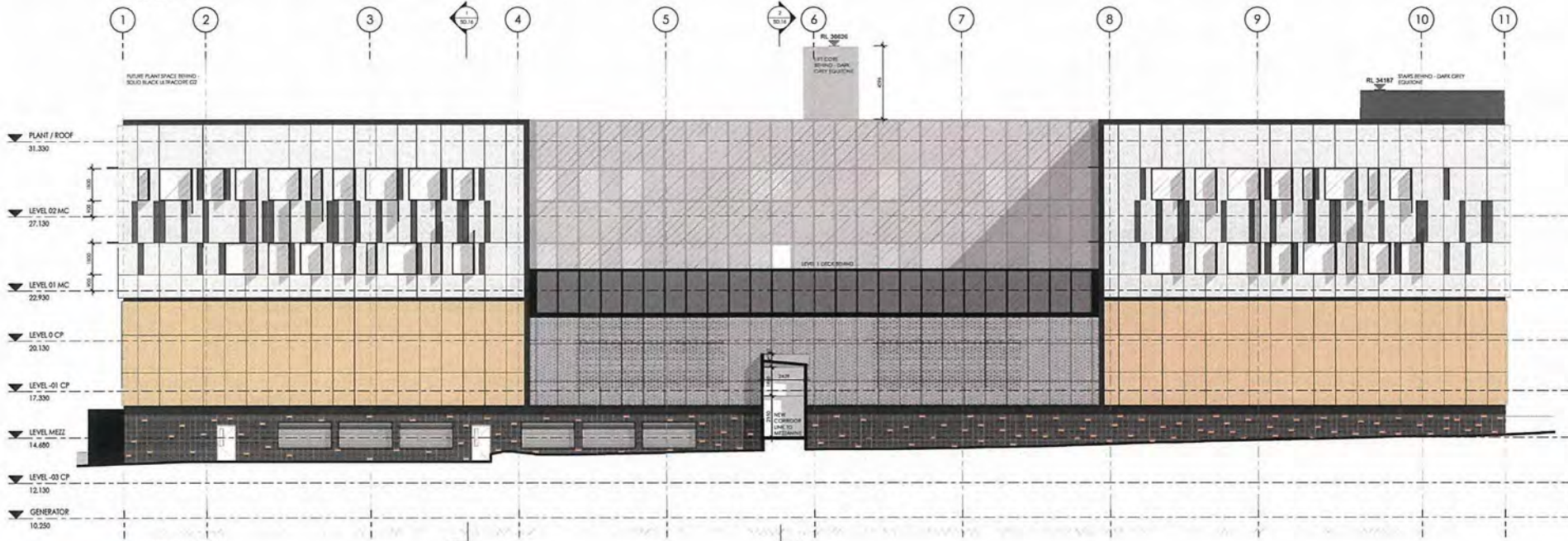
ELEVATIONS
HPH MEDICAL CENTRE AND CARPARK

FINISHES LEGEND	
	PERFORATED METAL SCREEN - POWDERCOATED COPPER COLOUR
	PERFORATED METAL SCREEN - POWDERCOATED CHARCOAL COLOUR
	ROOFING - DIF WAVE
	ROOFING - DARK GREY
	BRICK STACK BOND - DARK GREY BRICK WITH SPERD
	CLADDING - BRASSMINE
	CLADDING - PAVED
	CLADDING - COLOURBRACE
	WINDOW FRAMES - POWDERCOATED BLACK
	ARCADA DEEP BRICK BLADES - MONUMENT MATT
	SHADOW UNITS - MONUMENT MATT
	PANELS - ULTRACORE CE ALUMINIUM CLADDING IN SHOCK SILVER
	NORTHERN PLATES SURROUND - ULTRACORE CE ALUMINIUM CLADDING IN SOLID BLACK
	HOLLYWOOD CLADDING CENTRE SHAGE - BRICKED SILVER

NOTE:
MATCH PATTERNS INDICATE ONLY AND DOES NOT REPRESENT ACTUAL FINISH PATTERNS.

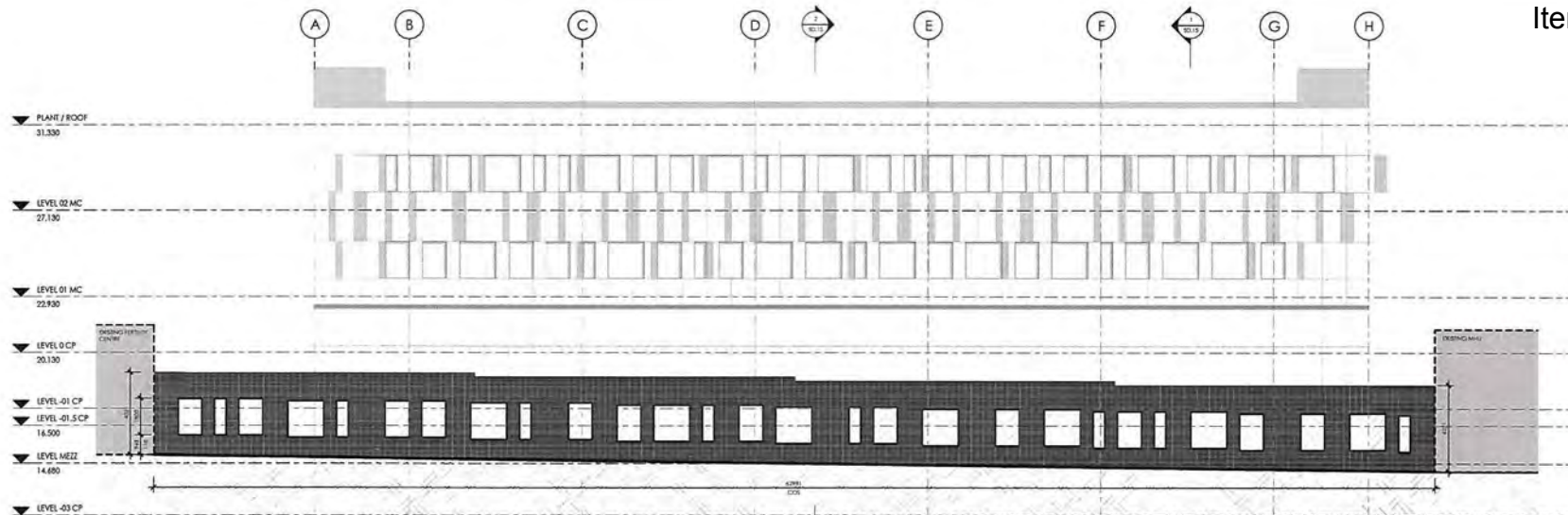


EAST ELEVATION
SCALE 1:100

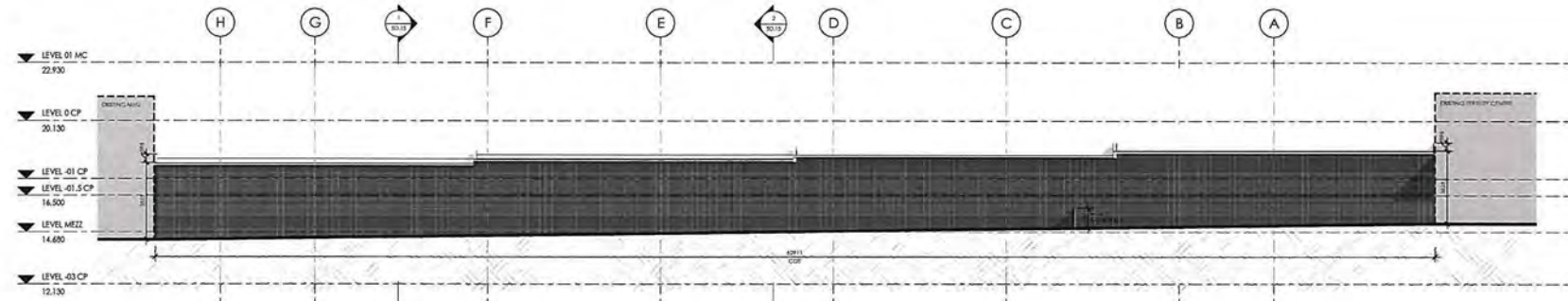


WEST ELEVATION
SCALE 1:100

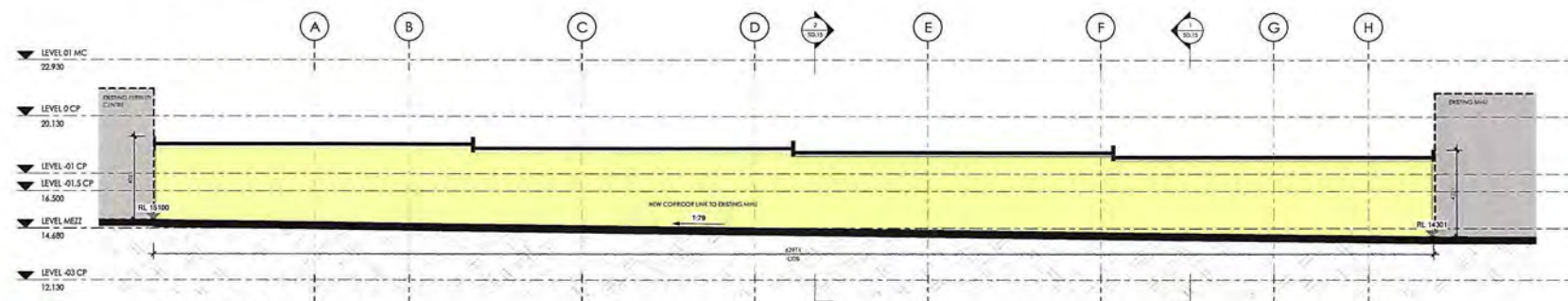




SOUTH ELEVATION
SCALE 1 : 100



NORTH ELEVATION
SCALE 1 : 100



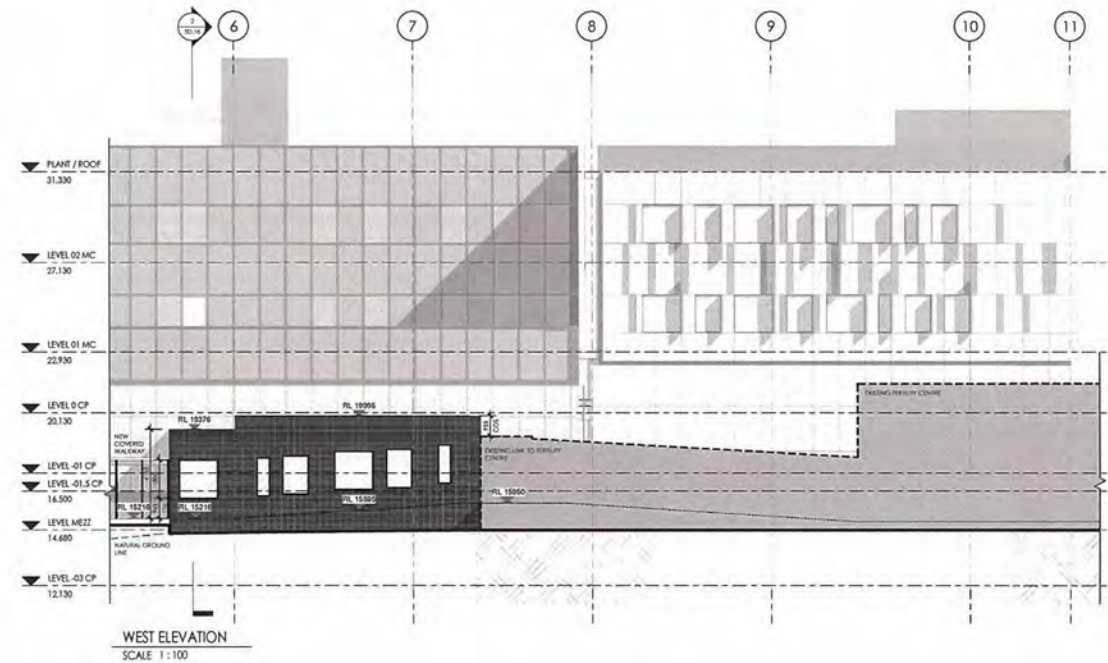
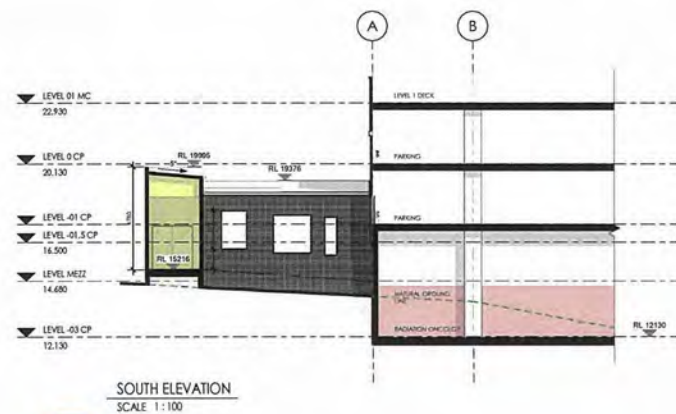
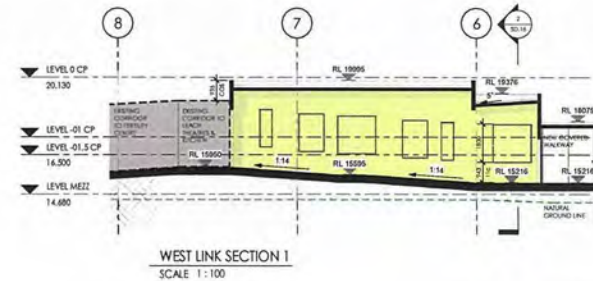
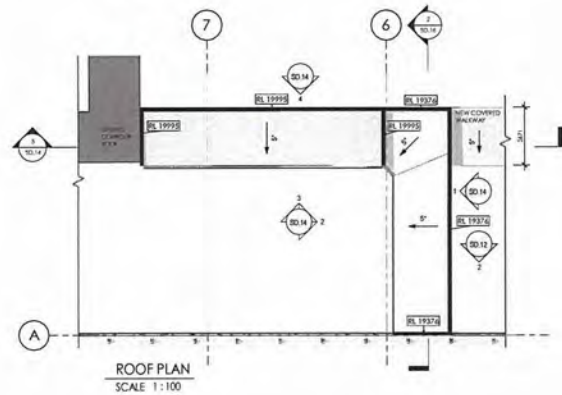
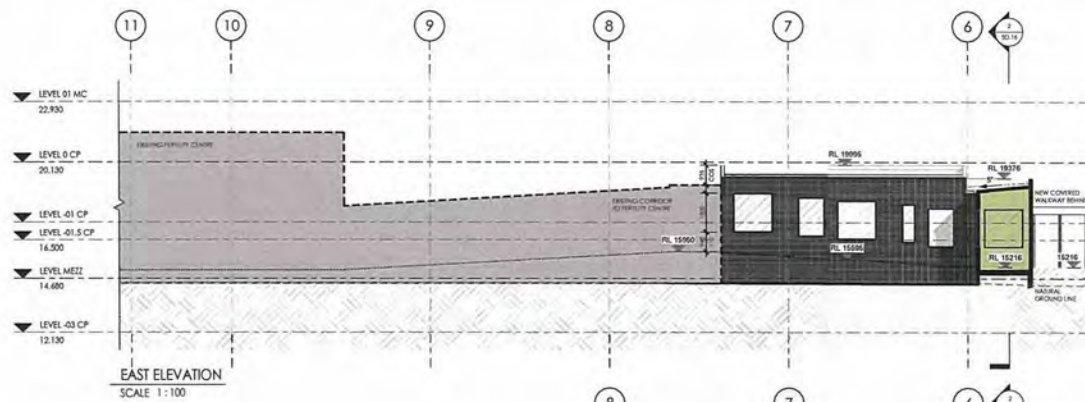
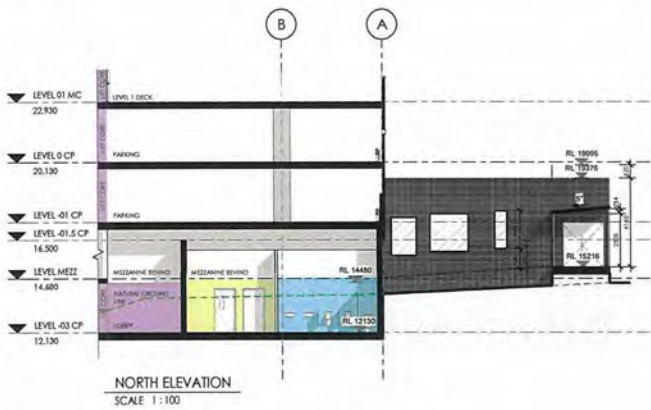
SOUTH LINK SECTION 1
SCALE 1 : 100

FINISHES LEGEND

	PURIFIED METAL SCREEN - POWDERCOATED COPPER COLOUR
	PURIFIED METAL SCREEN - POWDERCOATED CHARCOAL COLOUR
	EGIPONE - OFF WHITE
	EGIPONE - DARK GREY
	BRICK STACK BOND - DARK GREY BRICK INTERSPERSED WITH RED BRICK
	GLAZING - TRANSPARENT
	GLAZING - TINTED
	GLAZING - COLOURLESS
	WINDOW FRAMES - POWDERCOATED BLACK
	ACACIA 250 X 100 BLACK - NON-SLIP MAT
	SANDON LINES - 600 X 600 MAT
	PANELS - ULTRA-CORE 60 ALUMINIUM CLAD WITH 3000 SILVER
	HORIZONTAL SLATS - 80 X 1000 ULTRA-CORE 60 ALUMINIUM CLAD IN SOLID BLACK
	HOLLYWOOD CONDENSING CENTRE BONDED - 3000 SILVER

NOTE:
FINISH PATTERNS INDICATE ONLY AND DOES NOT REPRESENT ACTUAL FINISH PATTERNS.



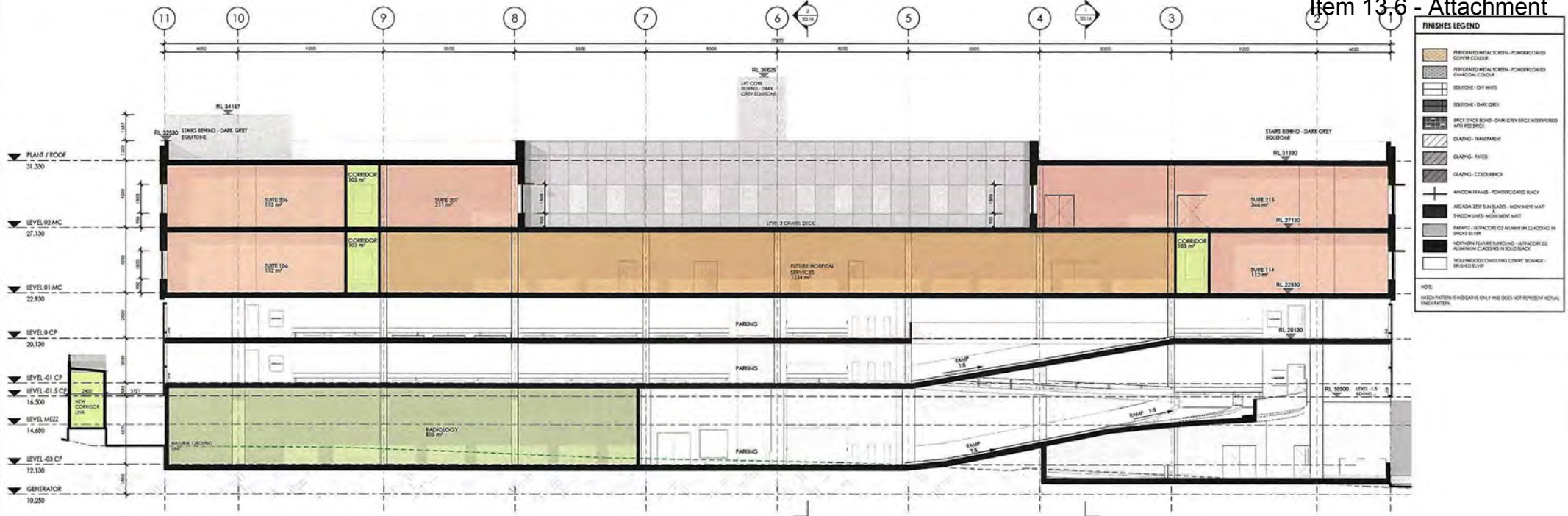


FINISHES LEGEND

- POWDERCOATED METAL SCREEN - POWDERCOATED COPPER COLOUR
- POWDERCOATED METAL SCREEN - POWDERCOATED CHARCOAL COLOUR
- EDGWORK - OFF WHITE
- EDGWORK - DARK GREY
- BLACK FACE BOND - DARK GREY BRICK INTERSPERSED WITH RED FACE
- CLADDING - REYNARD GREY
- CLADDING - TINTED
- CLADDING - GOLD/BRASS
- WINDOW FRAMES - POWDERCOATED BLACK
- SHALLOW LINES - ALUMINIUM MATT
- FACADES - REFLECTIVE OF ALUMINIUM CLADDING IN SMOKE SILVER
- NORTHERN FACADE - REFLECTIVE OF ALUMINIUM CLADDING IN BLACK
- NON-WOOD CLADDING CENTRE WINDOW - BRUSHED SILVER

NOTE:
MATCH PATTERNS INDICATE ONLY AND DOES NOT REPRESENT ACTUAL FINISH PATTERNS.





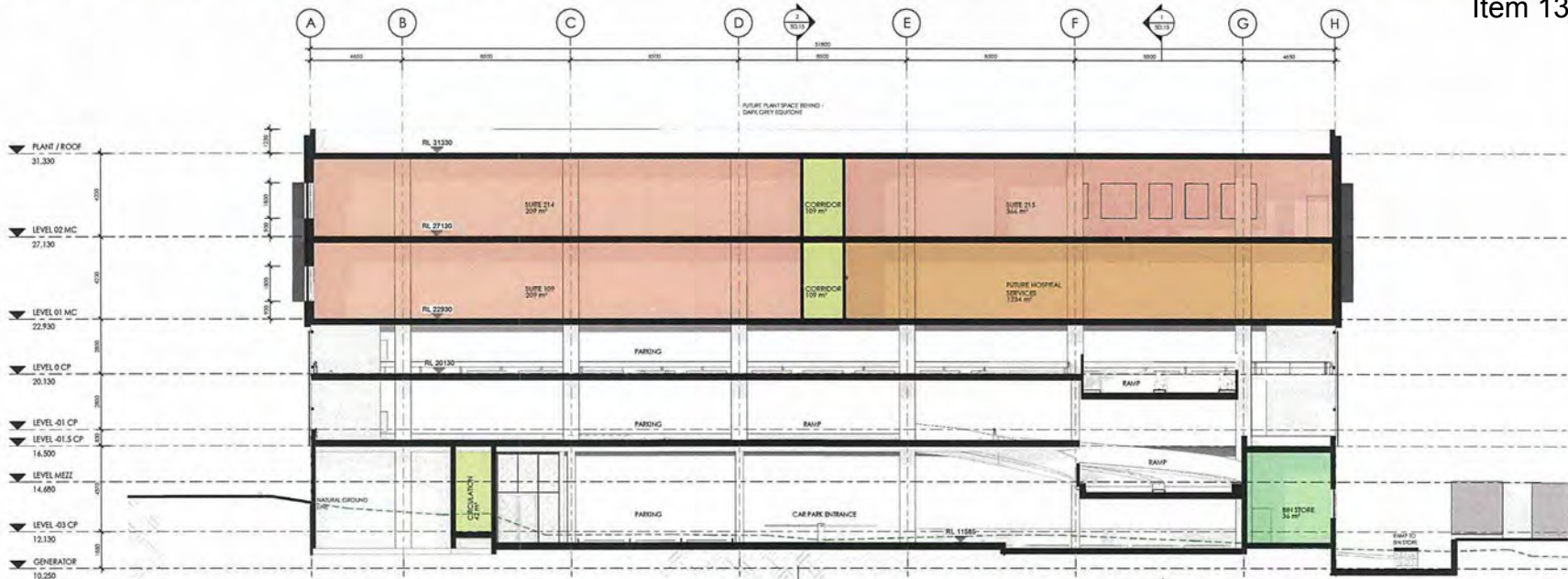
NORTH-SOUTH SECTION 1 - PARKING RAMP
SCALE 1:100



NORTH-SOUTH SECTION 2
SCALE 1:100



SECTIONS
HPH MEDICAL CENTRE AND CARPARK



EAST-WEST SECTION 1
SCALE 1:100



EAST-WEST SECTION 2 - LIFT CORE
SCALE 1:100

FINISHES LEGEND

- PERFORATED METAL SCREEN - POWDERCOATED COPPER COLOUR
- PERFORATED METAL SCREEN - POWDERCOATED CHAMPION COLOUR
- EQUICONE - OFF WHITE
- EQUICONE - DARK GREY
- BRICK STACK BOND - DARK GREY BRICK WORKFINISH WITH RED BACK
- GLASS - TRANSPARENT
- GLASS - TINTED
- GLASS - COLOURED
- WINDOW FRAMES - POWDERCOATED BLACK
- ALUMINA TOP EMBELIST - ALUMINUM MESH SHADOW GRID - MOUNTING BRACKET
- PANELS - RETRACTOR CO ALUMINUM CHLORIDE IN WHITE SLIVER
- NORTHERN TAMAR SURROUND - ALUMINUM CO ALUMINUM GLAZING IN TOWER BLACK
- HOLLYWOOD CORRELING CENTRE BONDAGE - BRUSHED SLIVER

NOTE:
MATCH PATTERNS INDICATIVE ONLY AND DOES NOT REPRESENT ACTUAL FINISH PATTERNS.



SECTIONS
HPH MEDICAL CENTRE AND CARPARK

Scale 1:100 @ B1
Date 02/07/18
SCALE BAR 1:100

Project No.	Sheet No.	Revision
3077	SD.16	

APPENDIX

C

SIDRA OUTPUTS

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Hampden Rd - 2018 Existing AM]

Hollywood Hospital Traffic Study
Monash Avenue/Hampden Road Intersection
2018 Weekday AM Peak Existing Traffic Volumes
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Hampden Road											
1	L2	79	5.0	0.404	4.8	LOS A	2.8	20.2	0.61	0.69	40.4
2	T1	20	0.0	0.404	6.1	LOS A	2.8	20.2	0.61	0.69	25.6
3	R2	288	5.0	0.404	7.7	LOS A	2.8	20.2	0.61	0.69	40.9
Approach		387	4.7	0.404	7.0	LOS A	2.8	20.2	0.61	0.69	39.6
East: Monash Avenue											
4	L2	198	5.0	0.442	5.1	LOS A	3.4	24.7	0.54	0.58	41.4
5	T1	229	5.0	0.442	5.0	LOS A	3.4	24.7	0.54	0.58	46.2
6	R2	62	0.0	0.442	8.2	LOS A	3.4	24.7	0.54	0.58	28.6
Approach		489	4.4	0.442	5.4	LOS A	3.4	24.7	0.54	0.58	41.1
West: Monash Avenue											
10	L2	38	0.0	0.439	6.8	LOS A	3.0	22.0	0.68	0.74	27.1
11	T1	171	5.0	0.439	6.6	LOS A	3.0	22.0	0.68	0.74	45.1
12	R2	180	5.0	0.439	9.9	LOS A	3.0	22.0	0.68	0.74	41.1
Approach		389	4.5	0.439	8.1	LOS A	3.0	22.0	0.68	0.74	40.7
All Vehicles		1265	4.5	0.442	6.8	LOS A	3.4	24.7	0.60	0.66	40.5

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Hampden Rd - 2018 Existing PM]

Hollywood Hospital Traffic Study
Monash Avenue/Hampden Road Intersection
2018 Weekday PM Peak Existing Traffic Volumes
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Hampden Road											
1	L2	79	5.0	0.336	3.8	LOS A	2.2	15.7	0.45	0.59	40.7
2	T1	15	0.0	0.336	5.2	LOS A	2.2	15.7	0.45	0.59	25.7
3	R2	277	5.0	0.336	6.7	LOS A	2.2	15.7	0.45	0.59	41.2
Approach		371	4.8	0.336	6.0	LOS A	2.2	15.7	0.45	0.59	40.1
East: Monash Avenue											
4	L2	198	5.0	0.306	4.3	LOS A	2.1	15.2	0.35	0.48	41.9
5	T1	167	5.0	0.306	4.3	LOS A	2.1	15.2	0.35	0.48	46.9
6	R2	11	0.0	0.306	7.5	LOS A	2.1	15.2	0.35	0.48	28.8
Approach		376	4.9	0.306	4.4	LOS A	2.1	15.2	0.35	0.48	43.4
West: Monash Avenue											
10	L2	9	0.0	0.346	6.1	LOS A	2.2	16.1	0.58	0.66	27.3
11	T1	219	5.0	0.346	5.9	LOS A	2.2	16.1	0.58	0.66	45.7
12	R2	99	5.0	0.346	9.1	LOS A	2.2	16.1	0.58	0.66	41.6
Approach		327	4.9	0.346	6.9	LOS A	2.2	16.1	0.58	0.66	43.6
All Vehicles		1074	4.8	0.346	5.7	LOS A	2.2	16.1	0.45	0.58	42.2

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Smyth Rd - 2018 Existing AM]

Hollywood Hospital Traffic Study
 Monash Avenue/Smyth Road Intersection
 2018 Weekday AM Peak Existing Traffic Volumes
 Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Smyth Road											
2	T1	332	5.0	0.322	1.8	LOS A	1.8	13.4	0.43	0.23	47.6
3	R2	145	5.0	0.322	7.8	LOS A	1.8	13.4	0.43	0.23	46.9
Approach		477	5.0	0.322	3.6	NA	1.8	13.4	0.43	0.23	47.4
East: Monash Avenue											
4	L2	42	5.0	0.040	8.8	LOS A	0.2	1.1	0.37	0.87	44.7
6	R2	29	5.0	0.066	13.4	LOS B	0.2	1.6	0.64	1.00	42.1
Approach		71	5.0	0.066	10.7	LOS B	0.2	1.6	0.48	0.92	43.6
North: Smyth Road											
7	L2	239	5.0	0.276	4.6	LOS A	0.0	0.0	0.00	0.25	48.0
8	T1	269	5.0	0.276	0.0	LOS A	0.0	0.0	0.00	0.25	48.5
Approach		508	5.0	0.276	2.2	NA	0.0	0.0	0.00	0.25	48.3
All Vehicles		1056	5.0	0.322	3.4	NA	1.8	13.4	0.23	0.29	47.5

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Smyth Rd - 2018 Existing PM]

Hollywood Hospital Traffic Study
 Monash Avenue/Smyth Road Intersection
 2018 Weekday PM Peak Existing Traffic Volumes
 Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Smyth Road											
2	T1	409	5.0	0.256	0.4	LOS A	0.5	3.7	0.14	0.06	49.3
3	R2	42	5.0	0.256	7.1	LOS A	0.5	3.7	0.14	0.06	48.5
Approach		451	5.0	0.256	1.0	NA	0.5	3.7	0.14	0.06	49.2
East: Monash Avenue											
4	L2	87	5.0	0.090	9.3	LOS A	0.3	2.6	0.43	0.90	44.5
6	R2	232	5.0	0.556	19.2	LOS C	3.0	21.8	0.80	1.17	39.6
Approach		319	5.0	0.556	16.5	LOS C	3.0	21.8	0.70	1.10	40.8
North: Smyth Road											
7	L2	112	5.0	0.241	4.6	LOS A	0.0	0.0	0.00	0.14	48.6
8	T1	337	5.0	0.241	0.0	LOS A	0.0	0.0	0.00	0.14	49.2
Approach		449	5.0	0.241	1.2	NA	0.0	0.0	0.00	0.14	49.1
All Vehicles		1219	5.0	0.556	5.1	NA	3.0	21.8	0.23	0.36	46.7

MOVEMENT SUMMARY

▽ Site: 1 [Smyth Rd/Verdun St - 2018 Existing AM]

Hollywood Hospital Traffic Study
Smyth Road/Verdun Street Intersection
2018 Weekday AM Peak Existing Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Smyth Road											
2	T1	428	5.0	0.271	0.6	LOS A	0.6	4.5	0.16	0.06	49.2
3	R2	42	5.0	0.271	8.0	LOS A	0.6	4.5	0.16	0.06	48.1
Approach		470	5.0	0.271	1.2	NA	0.6	4.5	0.16	0.06	49.1
East: Verdun Street											
4	L2	42	5.0	0.150	7.7	LOS A	0.5	3.7	0.64	0.80	42.7
6	R2	21	5.0	0.150	19.7	LOS C	0.5	3.7	0.64	0.80	42.3
Approach		63	5.0	0.150	11.7	LOS B	0.5	3.7	0.64	0.80	42.6
North: Smyth Road											
7	L2	39	5.0	0.291	4.6	LOS A	0.0	0.0	0.00	0.04	49.2
8	T1	509	5.0	0.291	0.0	LOS A	0.0	0.0	0.00	0.04	49.7
Approach		548	5.0	0.291	0.4	NA	0.0	0.0	0.00	0.04	49.7
All Vehicles		1081	5.0	0.291	1.4	NA	0.6	4.5	0.11	0.09	48.9

MOVEMENT SUMMARY

▽ Site: 1 [Smyth Rd/Verdun St - 2018 Existing PM]

Hollywood Hospital Traffic Study
Smyth Road/Verdun Street Intersection
2018 Weekday PM Peak Existing Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Smyth Road											
2	T1	421	5.0	0.426	1.9	LOS A	3.1	22.8	0.47	0.27	47.5
3	R2	227	5.0	0.426	7.6	LOS A	3.1	22.8	0.47	0.27	46.5
Approach		648	5.0	0.426	3.9	NA	3.1	22.8	0.47	0.27	47.1
East: Verdun Street											
4	L2	174	5.0	0.236	6.9	LOS A	0.9	6.9	0.53	0.71	44.8
6	R2	8	5.0	0.236	25.0	LOS D	0.9	6.9	0.53	0.71	44.4
Approach		182	5.0	0.236	7.7	LOS A	0.9	6.9	0.53	0.71	44.8
North: Smyth Road											
7	L2	32	5.0	0.222	4.6	LOS A	0.0	0.0	0.00	0.04	49.2
8	T1	385	5.0	0.222	0.0	LOS A	0.0	0.0	0.00	0.04	49.7
Approach		417	5.0	0.222	0.4	NA	0.0	0.0	0.00	0.04	49.7
All Vehicles		1247	5.0	0.426	3.3	NA	3.1	22.8	0.32	0.26	47.6

MOVEMENT SUMMARY

Site: 1 [Entry 5/Monash Ave - 2018 Existing AM]

Hollywood Hospital Traffic Study
Entry 5/Monash Avenue Intersection
2018 Weekday AM Peak Existing Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
East: Monash Avenue											
5	T1	155	5.0	0.230	1.5	LOS A	1.2	8.7	0.47	0.37	47.2
6	R2	178	0.0	0.230	6.3	LOS A	1.2	8.7	0.47	0.37	28.1
Approach		333	2.3	0.230	4.1	NA	1.2	8.7	0.47	0.37	34.7
North: Entry 5											
7	L2	22	0.0	0.027	1.5	LOS A	0.1	0.7	0.43	0.30	27.8
9	R2	2	0.0	0.027	6.8	LOS A	0.1	0.7	0.43	0.30	27.7
Approach		24	0.0	0.027	2.0	LOS A	0.1	0.7	0.43	0.30	27.8
West: Monash Avenue											
10	L2	78	0.0	0.210	4.6	LOS A	0.0	0.0	0.00	0.11	48.8
11	T1	318	5.0	0.210	0.0	LOS A	0.0	0.0	0.00	0.11	49.3
Approach		396	4.0	0.210	0.9	NA	0.0	0.0	0.00	0.11	49.2
All Vehicles		753	3.1	0.230	2.4	NA	1.2	8.7	0.22	0.23	40.7

MOVEMENT SUMMARY

Site: 1 [Entry 5/Monash Ave - 2018 Existing PM]

Hollywood Hospital Traffic Study
Entry 5/Monash Avenue Intersection
2018 Weekday PM Peak Existing Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
East: Monash Avenue											
5	T1	283	5.0	0.160	0.1	LOS A	0.1	0.9	0.04	0.03	49.7
6	R2	15	0.0	0.160	5.4	LOS A	0.1	0.9	0.04	0.03	29.0
Approach		298	4.7	0.160	0.3	NA	0.1	0.9	0.04	0.03	48.0
North: Entry 5											
7	L2	98	0.0	0.343	1.6	LOS A	1.6	11.3	0.49	0.55	27.3
9	R2	137	0.0	0.343	6.4	LOS A	1.6	11.3	0.49	0.55	27.2
Approach		235	0.0	0.343	4.4	LOS A	1.6	11.3	0.49	0.55	27.2
West: Monash Avenue											
10	L2	9	0.0	0.121	4.6	LOS A	0.0	0.0	0.00	0.02	49.4
11	T1	219	5.0	0.121	0.0	LOS A	0.0	0.0	0.00	0.02	49.9
Approach		228	4.8	0.121	0.2	NA	0.0	0.0	0.00	0.02	49.8
All Vehicles		761	3.3	0.343	1.5	NA	1.6	11.3	0.17	0.19	39.2

MOVEMENT SUMMARY

▽ Site: 1 [Entry 6/Verdun St - 2018 Existing AM]

Hollywood Hospital Traffic Study
Entry 6/Verdun Street Intersection
2018 Weekday AM Peak Existing Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 6											
1	L2	13	0.0	0.012	0.2	LOS A	0.0	0.3	0.17	0.07	28.1
3	R2	2	0.0	0.012	1.5	LOS A	0.0	0.3	0.17	0.07	27.9
Approach		15	0.0	0.012	0.4	LOS A	0.0	0.3	0.17	0.07	28.0
East: Verdun Street											
4	L2	9	0.0	0.041	4.6	LOS A	0.0	0.0	0.00	0.06	49.1
5	T1	68	5.0	0.041	0.0	LOS A	0.0	0.0	0.00	0.06	49.6
Approach		77	4.4	0.041	0.5	NA	0.0	0.0	0.00	0.06	49.6
West: Verdun Street											
11	T1	72	5.0	0.048	0.1	LOS A	0.1	0.7	0.07	0.11	49.2
12	R2	17	0.0	0.048	4.8	LOS A	0.1	0.7	0.07	0.11	28.8
Approach		89	4.0	0.048	1.0	NA	0.1	0.7	0.07	0.11	43.3
All Vehicles		181	3.9	0.048	0.7	NA	0.1	0.7	0.05	0.09	43.7

MOVEMENT SUMMARY

▽ Site: 1 [Entry 6/Verdun St - 2018 Existing PM]

Hollywood Hospital Traffic Study
Entry 6/Verdun Street Intersection
2018 Weekday PM Peak Existing Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 6											
1	L2	35	0.0	0.029	0.4	LOS A	0.1	0.8	0.20	0.09	28.0
3	R2	2	0.0	0.029	1.4	LOS A	0.1	0.8	0.20	0.09	27.9
Approach		37	0.0	0.029	0.4	LOS A	0.1	0.8	0.20	0.09	28.0
East: Verdun Street											
4	L2	1	0.0	0.053	4.6	LOS A	0.0	0.0	0.00	0.01	49.5
5	T1	99	5.0	0.053	0.0	LOS A	0.0	0.0	0.00	0.01	50.0
Approach		100	5.0	0.053	0.1	NA	0.0	0.0	0.00	0.01	50.0
West: Verdun Street											
11	T1	46	5.0	0.026	0.0	LOS A	0.0	0.1	0.02	0.02	49.8
12	R2	2	0.0	0.026	4.8	LOS A	0.0	0.1	0.02	0.02	29.0
Approach		48	4.8	0.026	0.2	NA	0.0	0.1	0.02	0.02	48.4
All Vehicles		185	3.9	0.053	0.2	NA	0.1	0.8	0.05	0.03	42.9

MOVEMENT SUMMARY

▽ Site: 1 [Entry 7/Verdun St - 2018 Existing AM]

Hollywood Hospital Traffic Study
Entry 7/Verdun Street Intersection
2018 Weekday AM Peak Existing Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 7											
1	L2	2	0.0	0.004	0.3	LOS A	0.0	0.1	0.20	0.13	28.0
3	R2	2	0.0	0.004	1.4	LOS A	0.0	0.1	0.20	0.13	27.9
Approach		4	0.0	0.004	0.9	LOS A	0.0	0.1	0.20	0.13	27.9
East: Verdun Street											
4	L2	20	0.0	0.048	4.6	LOS A	0.0	0.0	0.00	0.12	48.8
5	T1	70	5.0	0.048	0.0	LOS A	0.0	0.0	0.00	0.12	49.3
Approach		90	3.9	0.048	1.0	NA	0.0	0.0	0.00	0.12	49.2
West: Verdun Street											
11	T1	64	5.0	0.043	0.1	LOS A	0.1	0.6	0.08	0.11	49.2
12	R2	15	0.0	0.043	4.8	LOS A	0.1	0.6	0.08	0.11	28.8
Approach		79	4.1	0.043	1.0	NA	0.1	0.6	0.08	0.11	43.4
All Vehicles		173	3.9	0.048	1.0	NA	0.1	0.6	0.04	0.11	45.6

MOVEMENT SUMMARY

▽ Site: 1 [Entry 7/Verdun St - 2018 Existing PM]

Hollywood Hospital Traffic Study
Entry 7/Verdun Street Intersection
2018 Weekday PM Peak Existing Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 7											
1	L2	9	0.0	0.024	0.3	LOS A	0.1	0.6	0.21	0.16	28.0
3	R2	15	0.0	0.024	1.3	LOS A	0.1	0.6	0.21	0.16	27.9
Approach		24	0.0	0.024	0.9	LOS A	0.1	0.6	0.21	0.16	27.9
East: Verdun Street											
4	L2	2	0.0	0.043	4.6	LOS A	0.0	0.0	0.00	0.01	49.4
5	T1	79	5.0	0.043	0.0	LOS A	0.0	0.0	0.00	0.01	49.9
Approach		81	4.9	0.043	0.1	NA	0.0	0.0	0.00	0.01	49.9
West: Verdun Street											
11	T1	53	5.0	0.029	0.0	LOS A	0.0	0.1	0.02	0.02	49.8
12	R2	2	0.0	0.029	4.8	LOS A	0.0	0.1	0.02	0.02	29.1
Approach		55	4.8	0.029	0.2	NA	0.0	0.1	0.02	0.02	48.6
All Vehicles		160	4.1	0.043	0.3	NA	0.1	0.6	0.04	0.04	44.2

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Hampden Rd - 2018 + DEV AM]

Hollywood Hospital Traffic Study
 Monash Avenue/Hampden Road Intersection
 2018 Weekday AM Peak Future Traffic Volumes
 Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Hampden Road											
1	L2	79	5.0	0.439	5.5	LOS A	3.1	22.3	0.69	0.75	40.1
2	T1	20	0.0	0.439	6.8	LOS A	3.1	22.3	0.69	0.75	25.5
3	R2	288	5.0	0.439	8.4	LOS A	3.1	22.3	0.69	0.75	40.6
Approach		387	4.7	0.439	7.7	LOS A	3.1	22.3	0.69	0.75	39.3
East: Monash Avenue											
4	L2	198	5.0	0.508	5.2	LOS A	4.2	30.8	0.58	0.59	41.3
5	T1	305	5.0	0.508	5.1	LOS A	4.2	30.8	0.58	0.59	46.1
6	R2	62	0.0	0.508	8.3	LOS A	4.2	30.8	0.58	0.59	28.6
Approach		565	4.5	0.508	5.5	LOS A	4.2	30.8	0.58	0.59	41.6
West: Monash Avenue											
10	L2	38	0.0	0.501	7.2	LOS A	3.8	27.8	0.72	0.77	27.1
11	T1	224	5.0	0.501	7.0	LOS A	3.8	27.8	0.72	0.77	45.0
12	R2	180	5.0	0.501	10.3	LOS B	3.8	27.8	0.72	0.77	41.1
Approach		442	4.6	0.501	8.3	LOS A	3.8	27.8	0.72	0.77	41.1
All Vehicles		1394	4.6	0.508	7.0	LOS A	4.2	30.8	0.66	0.69	40.8

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Hampden Rd - 2018 + DEV PM]

Hollywood Hospital Traffic Study
 Monash Avenue/Hampden Road Intersection
 2018 Weekday PM Peak Future Traffic Volumes
 Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Hampden Road											
1	L2	79	5.0	0.355	4.2	LOS A	2.3	16.7	0.51	0.63	40.6
2	T1	15	0.0	0.355	5.5	LOS A	2.3	16.7	0.51	0.63	25.7
3	R2	277	5.0	0.355	7.1	LOS A	2.3	16.7	0.51	0.63	41.1
Approach		371	4.8	0.355	6.4	LOS A	2.3	16.7	0.51	0.63	40.0
East: Monash Avenue											
4	L2	198	5.0	0.339	4.3	LOS A	2.4	17.6	0.36	0.48	41.8
5	T1	210	5.0	0.339	4.3	LOS A	2.4	17.6	0.36	0.48	46.8
6	R2	11	0.0	0.339	7.5	LOS A	2.4	17.6	0.36	0.48	28.8
Approach		419	4.9	0.339	4.4	LOS A	2.4	17.6	0.36	0.48	43.7
West: Monash Avenue											
10	L2	9	0.0	0.400	6.2	LOS A	2.7	19.7	0.61	0.67	27.3
11	T1	270	5.0	0.400	6.0	LOS A	2.7	19.7	0.61	0.67	45.7
12	R2	99	5.0	0.400	9.2	LOS A	2.7	19.7	0.61	0.67	41.6
Approach		378	4.9	0.400	6.8	LOS A	2.7	19.7	0.61	0.67	43.8
All Vehicles		1168	4.9	0.400	5.8	LOS A	2.7	19.7	0.49	0.59	42.5

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Smyth Rd - 2018 + DEV AM]

Hollywood Hospital Traffic Study
 Monash Avenue/Smyth Road Intersection
 2018 Weekday AM Peak Future Traffic Volumes
 Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
South: Smyth Road												
2	T1	366	5.0	0.362	2.3	LOS A	2.3	17.1	0.47	0.24	47.3	
3	R2	157	5.0	0.362	8.5	LOS A	2.3	17.1	0.47	0.24	46.6	
Approach		523	5.0	0.362	4.1	NA	2.3	17.1	0.47	0.24	47.1	
East: Monash Avenue												
4	L2	45	5.0	0.044	9.0	LOS A	0.2	1.2	0.39	0.87	44.6	
6	R2	31	5.0	0.080	14.7	LOS B	0.3	1.9	0.69	1.00	41.5	
Approach		76	5.0	0.080	11.3	LOS B	0.3	1.9	0.51	0.93	43.3	
North: Smyth Road												
7	L2	260	5.0	0.301	4.6	LOS A	0.0	0.0	0.00	0.25	48.0	
8	T1	295	5.0	0.301	0.0	LOS A	0.0	0.0	0.00	0.25	48.5	
Approach		555	5.0	0.301	2.2	NA	0.0	0.0	0.00	0.25	48.3	
All Vehicles		1154	5.0	0.362	3.7	NA	2.3	17.1	0.25	0.29	47.4	

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Smyth Rd - 2018 + DEV PM]

Hollywood Hospital Traffic Study
 Monash Avenue/Smyth Road Intersection
 2018 Weekday PM Peak Future Traffic Volumes
 Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
South: Smyth Road												
2	T1	497	5.0	0.314	0.6	LOS A	0.8	5.7	0.16	0.06	49.1	
3	R2	48	5.0	0.314	8.2	LOS A	0.8	5.7	0.16	0.06	48.4	
Approach		545	5.0	0.314	1.3	NA	0.8	5.7	0.16	0.06	49.1	
East: Monash Avenue												
4	L2	116	5.0	0.132	9.9	LOS A	0.5	3.8	0.49	0.93	44.2	
6	R2	274	5.0	0.882	44.0	LOS E	8.1	59.2	0.96	1.74	31.2	
Approach		390	5.0	0.882	33.9	LOS D	8.1	59.2	0.82	1.50	34.2	
North: Smyth Road												
7	L2	130	5.0	0.291	4.6	LOS A	0.0	0.0	0.00	0.13	48.7	
8	T1	413	5.0	0.291	0.0	LOS A	0.0	0.0	0.00	0.13	49.2	
Approach		543	5.0	0.291	1.1	NA	0.0	0.0	0.00	0.13	49.1	
All Vehicles		1478	5.0	0.882	9.8	NA	8.1	59.2	0.27	0.46	44.0	

MOVEMENT SUMMARY

▽ Site: 1 [Smyth Rd/Verdun St - 2018 + DEV AM]

Hollywood Hospital Traffic Study
Smyth Road/Verdun Street Intersection
2018 Weekday AM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Smyth Road												
2	T1	430	5.0	0.311	1.2	LOS A	1.2	9.0	0.27	0.10	48.5	
3	R2	73	5.0	0.311	8.7	LOS A	1.2	9.0	0.27	0.10	47.5	
Approach		503	5.0	0.311	2.3	NA	1.2	9.0	0.27	0.10	48.3	
East: Verdun Street												
4	L2	68	5.0	0.271	8.9	LOS A	1.0	7.3	0.70	0.90	41.6	
6	R2	34	5.0	0.271	24.0	LOS C	1.0	7.3	0.70	0.90	41.3	
Approach		102	5.0	0.271	13.9	LOS B	1.0	7.3	0.70	0.90	41.5	
North: Smyth Road												
7	L2	69	5.0	0.319	4.6	LOS A	0.0	0.0	0.00	0.06	49.0	
8	T1	529	5.0	0.319	0.0	LOS A	0.0	0.0	0.00	0.06	49.6	
Approach		598	5.0	0.319	0.6	NA	0.0	0.0	0.00	0.06	49.5	
All Vehicles		1203	5.0	0.319	2.4	NA	1.2	9.0	0.17	0.15	48.2	

MOVEMENT SUMMARY

▽ Site: 1 [Smyth Rd/Verdun St - 2018 + DEV PM]

Hollywood Hospital Traffic Study
Smyth Road/Verdun Street Intersection
2018 Weekday PM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		Total veh/h	HV %				Vehicles veh	Distance m				
South: Smyth Road												
2	T1	464	5.0	0.497	2.6	LOS A	4.4	32.3	0.54	0.31	47.0	
3	R2	272	5.0	0.497	8.4	LOS A	4.4	32.3	0.54	0.31	46.0	
Approach		736	5.0	0.497	4.7	NA	4.4	32.3	0.54	0.31	46.6	
East: Verdun Street												
4	L2	250	5.0	0.361	7.9	LOS A	1.8	13.3	0.58	0.82	44.1	
6	R2	11	5.0	0.361	35.0	LOS D	1.8	13.3	0.58	0.82	43.7	
Approach		261	5.0	0.361	9.1	LOS A	1.8	13.3	0.58	0.82	44.0	
North: Smyth Road												
7	L2	38	5.0	0.235	4.6	LOS A	0.0	0.0	0.00	0.05	49.1	
8	T1	403	5.0	0.235	0.0	LOS A	0.0	0.0	0.00	0.05	49.7	
Approach		441	5.0	0.235	0.4	NA	0.0	0.0	0.00	0.05	49.6	
All Vehicles		1438	5.0	0.497	4.2	NA	4.4	32.3	0.38	0.32	47.0	

MOVEMENT SUMMARY

▽ Site: 1 [Entry 5/Monash Ave - 2018 + DEV AM]

Hollywood Hospital Traffic Study
Entry 5/Monash Avenue Intersection
2018 Weekday AM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
East: Monash Avenue											
5	T1	155	5.0	0.301	1.9	LOS A	1.7	12.3	0.54	0.45	46.8
6	R2	254	0.0	0.301	6.7	LOS A	1.7	12.3	0.54	0.45	28.0
Approach		409	1.9	0.301	4.9	NA	1.7	12.3	0.54	0.45	33.0
North: Entry 5											
7	L2	74	0.0	0.096	1.8	LOS A	0.4	2.5	0.46	0.37	27.7
9	R2	7	0.0	0.096	8.9	LOS A	0.4	2.5	0.46	0.37	27.6
Approach		81	0.0	0.096	2.4	LOS A	0.4	2.5	0.46	0.37	27.7
West: Monash Avenue											
10	L2	112	0.0	0.229	4.6	LOS A	0.0	0.0	0.00	0.14	48.6
11	T1	318	5.0	0.229	0.0	LOS A	0.0	0.0	0.00	0.14	49.1
Approach		430	3.7	0.229	1.2	NA	0.0	0.0	0.00	0.14	49.0
All Vehicles		920	2.6	0.301	3.0	NA	1.7	12.3	0.28	0.30	38.2

MOVEMENT SUMMARY

▽ Site: 1 [Entry 5/Monash Ave - 2018 + DEV PM]

Hollywood Hospital Traffic Study
Entry 5/Monash Avenue Intersection
2018 Weekday PM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
East: Monash Avenue											
5	T1	283	5.0	0.192	0.3	LOS A	0.5	3.4	0.16	0.10	49.0
6	R2	59	0.0	0.192	5.6	LOS A	0.5	3.4	0.16	0.10	28.8
Approach		342	4.1	0.192	1.2	NA	0.5	3.4	0.16	0.10	43.7
North: Entry 5											
7	L2	149	0.0	0.557	3.5	LOS A	3.8	26.9	0.58	0.87	26.7
9	R2	208	0.0	0.557	10.0	LOS A	3.8	26.9	0.58	0.87	26.6
Approach		357	0.0	0.557	7.3	LOS A	3.8	26.9	0.58	0.87	26.7
West: Monash Avenue											
10	L2	34	0.0	0.134	4.6	LOS A	0.0	0.0	0.00	0.07	49.1
11	T1	219	5.0	0.134	0.0	LOS A	0.0	0.0	0.00	0.07	49.5
Approach		253	4.3	0.134	0.6	NA	0.0	0.0	0.00	0.07	49.5
All Vehicles		952	2.6	0.557	3.3	NA	3.8	26.9	0.28	0.38	36.2

MOVEMENT SUMMARY

▽ Site: 1 [Entry 6/Verdun St - 2018 + DEV AM]

Hollywood Hospital Traffic Study
Entry 6/Verdun Street Intersection
2018 Weekday AM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 6											
1	L2	38	0.0	0.036	0.3	LOS A	0.1	1.0	0.18	0.09	28.1
3	R2	6	0.0	0.036	1.8	LOS A	0.1	1.0	0.18	0.09	27.9
Approach		44	0.0	0.036	0.5	LOS A	0.1	1.0	0.18	0.09	28.0
East: Verdun Street											
4	L2	27	0.0	0.051	4.6	LOS A	0.0	0.0	0.00	0.16	48.6
5	T1	68	5.0	0.051	0.0	LOS A	0.0	0.0	0.00	0.16	49.1
Approach		95	3.6	0.051	1.3	NA	0.0	0.0	0.00	0.16	48.9
West: Verdun Street											
11	T1	72	5.0	0.071	0.2	LOS A	0.3	2.0	0.16	0.23	48.2
12	R2	54	0.0	0.071	4.8	LOS A	0.3	2.0	0.16	0.23	28.5
Approach		126	2.9	0.071	2.2	NA	0.3	2.0	0.16	0.23	37.2
All Vehicles		265	2.6	0.071	1.6	NA	0.3	2.0	0.11	0.18	38.4

MOVEMENT SUMMARY

▽ Site: 1 [Entry 6/Verdun St - 2018 + DEV PM]

Hollywood Hospital Traffic Study
Entry 6/Verdun Street Intersection
2018 Weekday PM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 6											
1	L2	92	0.0	0.077	0.4	LOS A	0.3	2.2	0.21	0.10	28.0
3	R2	6	0.0	0.077	1.7	LOS A	0.3	2.2	0.21	0.10	27.9
Approach		98	0.0	0.077	0.5	LOS A	0.3	2.2	0.21	0.10	28.0
East: Verdun Street											
4	L2	1	0.0	0.053	4.6	LOS A	0.0	0.0	0.00	0.01	49.5
5	T1	99	5.0	0.053	0.0	LOS A	0.0	0.0	0.00	0.01	50.0
Approach		100	5.0	0.053	0.1	NA	0.0	0.0	0.00	0.01	50.0
West: Verdun Street											
11	T1	46	5.0	0.046	0.2	LOS A	0.2	1.3	0.17	0.24	48.2
12	R2	36	0.0	0.046	4.9	LOS A	0.2	1.3	0.17	0.24	28.5
Approach		82	2.8	0.046	2.2	NA	0.2	1.3	0.17	0.24	37.0
All Vehicles		280	2.6	0.077	0.8	NA	0.3	2.2	0.12	0.11	36.3

MOVEMENT SUMMARY

▽ Site: 1 [Entry 7/Verdun St - 2018 + DEV AM]

Hollywood Hospital Traffic Study
Entry 7/Verdun Street Intersection
2018 Weekday AM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 7											
1	L2	17	0.0	0.034	0.3	LOS A	0.1	0.8	0.22	0.17	28.0
3	R2	17	0.0	0.034	1.8	LOS A	0.1	0.8	0.22	0.17	27.8
Approach		34	0.0	0.034	1.0	LOS A	0.1	0.8	0.22	0.17	27.9
East: Verdun Street											
4	L2	50	0.0	0.064	4.6	LOS A	0.0	0.0	0.00	0.23	48.2
5	T1	70	5.0	0.064	0.0	LOS A	0.0	0.0	0.00	0.23	48.7
Approach		120	2.9	0.064	1.9	NA	0.0	0.0	0.00	0.23	48.5
West: Verdun Street											
11	T1	64	5.0	0.058	0.2	LOS A	0.2	1.5	0.17	0.21	48.4
12	R2	39	0.0	0.058	4.9	LOS A	0.2	1.5	0.17	0.21	28.6
Approach		103	3.1	0.058	2.0	NA	0.2	1.5	0.17	0.21	38.3
All Vehicles		257	2.6	0.064	1.8	NA	0.2	1.5	0.10	0.21	40.3

MOVEMENT SUMMARY

▽ Site: 1 [Entry 7/Verdun St - 2018 + DEV PM]

Hollywood Hospital Traffic Study
Entry 7/Verdun Street Intersection
2018 Weekday PM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 7											
1	L2	31	0.0	0.086	0.3	LOS A	0.3	2.2	0.23	0.20	28.0
3	R2	54	0.0	0.086	1.6	LOS A	0.3	2.2	0.23	0.20	27.8
Approach		85	0.0	0.086	1.1	LOS A	0.3	2.2	0.23	0.20	27.9
East: Verdun Street											
4	L2	19	0.0	0.052	4.6	LOS A	0.0	0.0	0.00	0.11	48.9
5	T1	79	5.0	0.052	0.0	LOS A	0.0	0.0	0.00	0.11	49.4
Approach		98	4.0	0.052	0.9	NA	0.0	0.0	0.00	0.11	49.3
West: Verdun Street											
11	T1	53	5.0	0.040	0.1	LOS A	0.1	0.8	0.11	0.15	48.9
12	R2	19	0.0	0.040	4.8	LOS A	0.1	0.8	0.11	0.15	28.7
Approach		72	3.7	0.040	1.4	NA	0.1	0.8	0.11	0.15	41.2
All Vehicles		255	2.6	0.086	1.1	NA	0.3	2.2	0.11	0.15	37.6

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Hampden Rd - 2028 + DEV AM]

Hollywood Hospital Traffic Study
 Monash Avenue/Hampden Road Intersection
 2028 Weekday AM Peak Future Traffic Volumes
 Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Hampden Road											
1	L2	83	5.0	0.517	6.3	LOS A	4.1	30.1	0.75	0.80	39.8
2	T1	23	0.0	0.517	7.5	LOS A	4.1	30.1	0.75	0.80	25.3
3	R2	341	5.0	0.517	9.2	LOS A	4.1	30.1	0.75	0.80	40.2
Approach		447	4.7	0.517	8.5	LOS A	4.1	30.1	0.75	0.80	39.0
East: Monash Avenue											
4	L2	234	5.0	0.571	5.5	LOS A	5.1	37.3	0.66	0.63	41.1
5	T1	318	5.0	0.571	5.5	LOS A	5.1	37.3	0.66	0.63	45.9
6	R2	62	0.0	0.571	8.6	LOS A	5.1	37.3	0.66	0.63	28.5
Approach		614	4.5	0.571	5.8	LOS A	5.1	37.3	0.66	0.63	41.5
West: Monash Avenue											
10	L2	38	0.0	0.591	9.2	LOS A	5.5	40.1	0.82	0.89	26.7
11	T1	247	5.0	0.591	9.0	LOS A	5.5	40.1	0.82	0.89	44.1
12	R2	205	5.0	0.591	12.2	LOS B	5.5	40.1	0.82	0.89	40.2
Approach		490	4.6	0.591	10.3	LOS B	5.5	40.1	0.82	0.89	40.4
All Vehicles		1551	4.6	0.591	8.0	LOS A	5.5	40.1	0.74	0.76	40.4

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Hampden Rd - 2028 + DEV PM]

Hollywood Hospital Traffic Study
 Monash Avenue/Hampden Road Intersection
 2028 Weekday PM Peak Future Traffic Volumes
 Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Hampden Road											
1	L2	90	5.0	0.422	4.5	LOS A	2.9	21.3	0.57	0.66	40.5
2	T1	15	0.0	0.422	5.8	LOS A	2.9	21.3	0.57	0.66	25.6
3	R2	328	5.0	0.422	7.4	LOS A	2.9	21.3	0.57	0.66	40.9
Approach		433	4.8	0.422	6.7	LOS A	2.9	21.3	0.57	0.66	40.0
East: Monash Avenue											
4	L2	234	5.0	0.391	4.4	LOS A	3.0	21.7	0.40	0.50	41.7
5	T1	233	5.0	0.391	4.4	LOS A	3.0	21.7	0.40	0.50	46.7
6	R2	11	0.0	0.391	7.6	LOS A	3.0	21.7	0.40	0.50	28.8
Approach		478	4.9	0.391	4.5	LOS A	3.0	21.7	0.40	0.50	43.6
West: Monash Avenue											
10	L2	9	0.0	0.460	6.8	LOS A	3.3	23.8	0.69	0.72	27.2
11	T1	293	5.0	0.460	6.5	LOS A	3.3	23.8	0.69	0.72	45.4
12	R2	109	5.0	0.460	9.8	LOS A	3.3	23.8	0.69	0.72	41.4
Approach		411	4.9	0.460	7.4	LOS A	3.3	23.8	0.69	0.72	43.6
All Vehicles		1322	4.9	0.460	6.1	LOS A	3.3	23.8	0.55	0.62	42.4

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Smyth Rd - 2028 + DEV AM]

Hollywood Hospital Traffic Study
 Monash Avenue/Smyth Road Intersection
 2028 Weekday AM Peak Future Traffic Volumes
 Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Smyth Road											
2	T1	423	5.0	0.432	3.2	LOS A	3.3	24.2	0.52	0.25	46.7
3	R2	174	5.0	0.432	9.9	LOS A	3.3	24.2	0.52	0.25	46.0
Approach		597	5.0	0.432	5.1	NA	3.3	24.2	0.52	0.25	46.5
East: Monash Avenue											
4	L2	50	5.0	0.052	9.3	LOS A	0.2	1.4	0.42	0.88	44.5
6	R2	34	5.0	0.108	17.3	LOS C	0.3	2.5	0.75	1.00	40.4
Approach		84	5.0	0.108	12.5	LOS B	0.3	2.5	0.55	0.93	42.7
North: Smyth Road											
7	L2	288	5.0	0.341	4.6	LOS A	0.0	0.0	0.00	0.25	48.0
8	T1	341	5.0	0.341	0.0	LOS A	0.0	0.0	0.00	0.25	48.6
Approach		629	5.0	0.341	2.2	NA	0.0	0.0	0.00	0.25	48.3
All Vehicles		1310	5.0	0.432	4.2	NA	3.3	24.2	0.27	0.29	47.1

MOVEMENT SUMMARY

Site: 1 [Monash Ave/Smyth Rd - 2028 + DEV PM]

Hollywood Hospital Traffic Study
 Monash Avenue/Smyth Road Intersection
 2028 Weekday PM Peak Future Traffic Volumes
 Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Smyth Road											
2	T1	571	5.0	0.366	0.9	LOS A	1.1	8.3	0.18	0.06	58.4
3	R2	54	5.0	0.366	10.4	LOS B	1.1	8.3	0.18	0.06	56.3
Approach		625	5.0	0.366	1.7	NA	1.1	8.3	0.18	0.06	58.2
East: Monash Avenue											
4	L2	123	5.0	0.152	11.0	LOS B	0.6	4.3	0.52	0.95	50.3
6	R2	293	5.0	1.236	258.4	LOS F	42.5	310.1	1.00	3.63	11.4
Approach		416	5.0	1.236	185.2	LOS F	42.5	310.1	0.86	2.84	14.8
North: Smyth Road											
7	L2	146	5.0	0.332	5.6	LOS A	0.0	0.0	0.00	0.14	56.9
8	T1	473	5.0	0.332	0.0	LOS A	0.0	0.0	0.00	0.14	58.7
Approach		619	5.0	0.332	1.4	NA	0.0	0.0	0.00	0.14	58.2
All Vehicles		1660	5.0	1.236	47.6	NA	42.5	310.1	0.28	0.79	33.5

MOVEMENT SUMMARY

▽ Site: 1 [Smyth Rd/Verdun St - 2028 + DEV AM]

Hollywood Hospital Traffic Study
Smyth Road/Verdun Street Intersection
2028 Weekday AM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Smyth Road											
2	T1	505	5.0	0.368	1.7	LOS A	1.7	12.6	0.30	0.10	48.2
3	R2	78	5.0	0.368	10.2	LOS B	1.7	12.6	0.30	0.10	47.2
Approach		583	5.0	0.368	2.8	NA	1.7	12.6	0.30	0.10	48.0
East: Verdun Street											
4	L2	74	5.0	0.390	11.9	LOS B	1.5	11.1	0.79	0.99	39.1
6	R2	37	5.0	0.390	35.2	LOS E	1.5	11.1	0.79	0.99	38.8
Approach		111	5.0	0.390	19.6	LOS C	1.5	11.1	0.79	0.99	39.0
North: Smyth Road											
7	L2	73	5.0	0.362	4.6	LOS A	0.0	0.0	0.00	0.06	49.0
8	T1	607	5.0	0.362	0.0	LOS A	0.0	0.0	0.00	0.06	49.6
Approach		680	5.0	0.362	0.5	NA	0.0	0.0	0.00	0.06	49.5
All Vehicles		1374	5.0	0.390	3.0	NA	1.7	12.6	0.19	0.15	47.8

MOVEMENT SUMMARY

▽ Site: 1 [Smyth Rd/Verdun St - 2028 + DEV PM]

Hollywood Hospital Traffic Study
Smyth Road/Verdun Street Intersection
2028 Weekday PM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Smyth Road											
2	T1	516	5.0	0.590	4.0	LOS A	6.5	47.7	0.64	0.38	46.0
3	R2	313	5.0	0.590	10.1	LOS B	6.5	47.7	0.64	0.38	45.1
Approach		829	5.0	0.590	6.3	NA	6.5	47.7	0.64	0.38	45.7
East: Verdun Street											
4	L2	274	5.0	0.469	9.8	LOS A	2.7	19.7	0.65	0.97	42.7
6	R2	12	5.0	0.469	53.4	LOS F	2.7	19.7	0.65	0.97	42.4
Approach		286	5.0	0.469	11.7	LOS B	2.7	19.7	0.65	0.97	42.7
North: Smyth Road											
7	L2	44	5.0	0.273	4.6	LOS A	0.0	0.0	0.00	0.05	49.1
8	T1	469	5.0	0.273	0.0	LOS A	0.0	0.0	0.00	0.05	49.7
Approach		513	5.0	0.273	0.4	NA	0.0	0.0	0.00	0.05	49.6
All Vehicles		1628	5.0	0.590	5.4	NA	6.5	47.7	0.44	0.38	46.3

MOVEMENT SUMMARY

Site: 1 [Entry 5/Monash Ave - 2028 + DEV AM]

Hollywood Hospital Traffic Study
Entry 5/Monash Avenue Intersection
2028 Weekday AM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Monash Avenue											
5	T1	171	5.0	0.321	2.3	LOS A	2.0	14.4	0.56	0.47	46.6
6	R2	254	0.0	0.321	7.2	LOS A	2.0	14.4	0.56	0.47	27.9
Approach		425	2.0	0.321	5.2	NA	2.0	14.4	0.56	0.47	33.3
North: Entry 5											
7	L2	74	0.0	0.102	2.1	LOS A	0.4	2.7	0.49	0.41	27.6
9	R2	7	0.0	0.102	10.1	LOS B	0.4	2.7	0.49	0.41	27.5
Approach		81	0.0	0.102	2.8	LOS A	0.4	2.7	0.49	0.41	27.6
West: Monash Avenue											
10	L2	112	0.0	0.252	4.6	LOS A	0.0	0.0	0.00	0.13	48.7
11	T1	362	5.0	0.252	0.0	LOS A	0.0	0.0	0.00	0.13	49.2
Approach		474	3.8	0.252	1.1	NA	0.0	0.0	0.00	0.13	49.1
All Vehicles		980	2.7	0.321	3.0	NA	2.0	14.4	0.29	0.30	38.7

MOVEMENT SUMMARY

Site: 1 [Entry 5/Monash Ave - 2028 + DEV PM]

Hollywood Hospital Traffic Study
Entry 5/Monash Avenue Intersection
2028 Weekday PM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Monash Avenue											
5	T1	324	5.0	0.215	0.3	LOS A	0.5	3.7	0.15	0.09	49.1
6	R2	59	0.0	0.215	5.8	LOS A	0.5	3.7	0.15	0.09	28.8
Approach		383	4.2	0.215	1.1	NA	0.5	3.7	0.15	0.09	44.3
North: Entry 5											
7	L2	149	0.0	0.613	4.7	LOS A	4.4	31.0	0.63	1.03	26.4
9	R2	208	0.0	0.613	12.5	LOS B	4.4	31.0	0.63	1.03	26.2
Approach		357	0.0	0.613	9.2	LOS A	4.4	31.0	0.63	1.03	26.3
West: Monash Avenue											
10	L2	34	0.0	0.150	4.6	LOS A	0.0	0.0	0.00	0.07	49.1
11	T1	249	5.0	0.150	0.0	LOS A	0.0	0.0	0.00	0.07	49.6
Approach		283	4.4	0.150	0.6	NA	0.0	0.0	0.00	0.07	49.5
All Vehicles		1023	2.8	0.613	3.8	NA	4.4	31.0	0.28	0.41	36.6

MOVEMENT SUMMARY

▽ Site: 1 [Entry 6/Verdun St - 2028 + DEV AM]

Hollywood Hospital Traffic Study
Entry 6/Verdun Street Intersection
2028 Weekday AM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 6											
1	L2	38	0.0	0.036	0.3	LOS A	0.1	1.0	0.20	0.10	28.0
3	R2	6	0.0	0.036	2.0	LOS A	0.1	1.0	0.20	0.10	27.9
Approach		44	0.0	0.036	0.6	LOS A	0.1	1.0	0.20	0.10	28.0
East: Verdun Street											
4	L2	27	0.0	0.057	4.6	LOS A	0.0	0.0	0.00	0.14	48.7
5	T1	80	5.0	0.057	0.0	LOS A	0.0	0.0	0.00	0.14	49.2
Approach		107	3.7	0.057	1.2	NA	0.0	0.0	0.00	0.14	49.1
West: Verdun Street											
11	T1	83	5.0	0.077	0.2	LOS A	0.3	2.1	0.16	0.22	48.3
12	R2	54	0.0	0.077	4.9	LOS A	0.3	2.1	0.16	0.22	28.5
Approach		137	3.0	0.077	2.0	NA	0.3	2.1	0.16	0.22	38.0
All Vehicles		288	2.8	0.077	1.5	NA	0.3	2.1	0.11	0.17	39.1

MOVEMENT SUMMARY

▽ Site: 1 [Entry 6/Verdun St - 2028 + DEV PM]

Hollywood Hospital Traffic Study
Entry 6/Verdun Street Intersection
2028 Weekday PM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 6											
1	L2	92	0.0	0.079	0.5	LOS A	0.3	2.2	0.23	0.12	28.0
3	R2	6	0.0	0.079	1.9	LOS A	0.3	2.2	0.23	0.12	27.9
Approach		98	0.0	0.079	0.5	LOS A	0.3	2.2	0.23	0.12	28.0
East: Verdun Street											
4	L2	1	0.0	0.061	4.6	LOS A	0.0	0.0	0.00	0.00	49.5
5	T1	115	5.0	0.061	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		116	5.0	0.061	0.0	NA	0.0	0.0	0.00	0.00	50.0
West: Verdun Street											
11	T1	54	5.0	0.051	0.2	LOS A	0.2	1.4	0.17	0.22	48.3
12	R2	36	0.0	0.051	4.9	LOS A	0.2	1.4	0.17	0.22	28.5
Approach		90	3.0	0.051	2.1	NA	0.2	1.4	0.17	0.22	37.8
All Vehicles		304	2.8	0.079	0.8	NA	0.3	2.2	0.13	0.10	37.0

MOVEMENT SUMMARY

▽ Site: 1 [Entry 7/Verdun St - 2028 + DEV AM]

Hollywood Hospital Traffic Study
Entry 7/Verdun Street Intersection
2028 Weekday AM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 7											
1	L2	17	0.0	0.034	5.9	LOS A	0.1	0.9	0.24	0.57	52.9
3	R2	17	0.0	0.034	6.8	LOS A	0.1	0.9	0.24	0.57	52.4
Approach		34	0.0	0.034	6.3	LOS A	0.1	0.9	0.24	0.57	52.7
East: Verdun Street											
4	L2	50	0.0	0.070	5.5	LOS A	0.0	0.0	0.00	0.22	56.4
5	T1	82	5.0	0.070	0.0	LOS A	0.0	0.0	0.00	0.22	57.9
Approach		132	3.1	0.070	2.1	NA	0.0	0.0	0.00	0.22	57.3
West: Verdun Street											
11	T1	75	5.0	0.064	0.2	LOS A	0.2	1.6	0.17	0.20	57.5
12	R2	39	0.0	0.064	5.9	LOS A	0.2	1.6	0.17	0.20	55.4
Approach		114	3.3	0.064	2.1	NA	0.2	1.6	0.17	0.20	56.8
All Vehicles		280	2.8	0.070	2.6	NA	0.2	1.6	0.10	0.26	56.5

MOVEMENT SUMMARY

▽ Site: 1 [Entry 7/Verdun St - 2028 + DEV PM]

Hollywood Hospital Traffic Study
Entry 7/Verdun Street Intersection
2028 Weekday PM Peak Future Traffic Volumes
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Entry 7											
1	L2	31	0.0	0.088	0.4	LOS A	0.3	2.2	0.26	0.22	28.0
3	R2	54	0.0	0.088	1.8	LOS A	0.3	2.2	0.26	0.22	27.8
Approach		85	0.0	0.088	1.3	LOS A	0.3	2.2	0.26	0.22	27.9
East: Verdun Street											
4	L2	19	0.0	0.060	4.6	LOS A	0.0	0.0	0.00	0.09	49.0
5	T1	94	5.0	0.060	0.0	LOS A	0.0	0.0	0.00	0.09	49.4
Approach		113	4.2	0.060	0.8	NA	0.0	0.0	0.00	0.09	49.4
West: Verdun Street											
11	T1	62	5.0	0.045	0.1	LOS A	0.1	0.8	0.11	0.13	49.0
12	R2	19	0.0	0.045	4.9	LOS A	0.1	0.8	0.11	0.13	28.8
Approach		81	3.8	0.045	1.2	NA	0.1	0.8	0.11	0.13	42.0
All Vehicles		279	2.8	0.088	1.1	NA	0.3	2.2	0.11	0.14	38.4

About Cardno

Cardno is a professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Contact

11 Harvest Terrace
West Perth 6005
Australia

Phone +61 8 9273 3888
Fax +61 8 9486 8664

Web Address
www.cardno.com

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
1	<p>A review of the base traffic volumes utilised in the assessment indicates that the assessment did not consider Winthrop Avenue volumes which are readily available from Main Roads WA in the form of SCATS data for 2018 or critical traffic volumes on Monash Avenue, east of Smyth Road in the vicinity of the hospital site. It also did not document existing volumes on Verdun Street to the north of the site which are critical in the context of the future scenario assessments.</p>	<p>The City believes that analysis of Winthrop Ave is not required, and this is supported by the DLPH officers.</p> <p>Please advise why the critical traffic volumes along Monash Avenue east of Smyth Road have not been included in the TIA.</p> <p>Please advise why the existing traffic volumes on Verdun Street north of the site were not analysed. Please note that even though the access is limited to staff deliveries, the building will generate additional staff and delivery traffic movements which will utilise Verdun Street.</p>	<p>Agreed.</p> <p>A very conservative approach to traffic generation and distribution has been taken to investigate the potential impacts on critical intersections</p> <p>Traffic volumes to the east of Smyth were not explicitly included in Table 2-1. However, they have been included in Section 6.4 which details the background traffic volumes during the critical AM and PM peak periods.</p> <p>Traffic impact in this context is minimal, as shown by the SIDRA assessment for the Main HPH access intersection, and the Monash/Hampden intersection, which remains at a Level of Service B or better for all legs even for the 2028 scenario.</p> <p>Traffic volumes along Verdun Street are very low, well below the capacity of this road. Nevertheless, SIDRA assessment has been completed for the access to Verdun Street and the Smyth/Verdun intersection. This shows that the intersection functions at an acceptable Level of Service following redevelopment.</p>
2	<p>A summary of potential future significant public transport upgrades to service within the immediate area and beyond indicates that there is currently not planning, programming or funding for these improvements in the short- to medium-term (10+ years) and hence bus services to the area will continue to function as the only public transport services in the foreseeable future. These long-term improvements are therefore not relevant in the context of this assessment and will</p>	<p>The City concurs with this statement and hence requests that the traffic impact assessment is updated accordingly.</p>	<p>The TIA does not rely on any improvements to public transport in its assessment of transport impact. Mode shift has not been assumed in any calculations. These public transport plans are retained to provide context only.</p>

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
	not result in the increase in mode shift away from the private motor vehicle.		
3	The assessment documents that the peak periods assessed include only the weekday a.m. and p.m. peak hours, however, due to the proximity of the Hollywood Primary School immediately to the west which impacts on traffic operations and car parking demands during the a.m. peak hour and the school p.m. peak hour coincident with early shift staff departing the hospital site between 2:30 and 3:00 p.m. on a weekday, the school p.m. peak hour is considered to be critical in the context of the assessment. The assessment should be modified to include this peak period.	More information is to be provided in relation to the operation of the building (namely the future hospital services but also the consulting rooms) and if this will impact on school peak movements. If it can be adequately justified that the development will not impact on the school pm peak movements, the additional information requested below will not need to address the pm peak movements.	The proposed development includes relocation of services internal to HPH (which will not induce additional staff trips) and new medical consulting rooms. Staff for the consulting rooms will likely work standard office hours, which defines the choice for traffic impact assessment. Traffic impacts of the proposed development during the school peak are therefore expected to be negligible.
4	In relation to scenarios considered in the context of the assessment, the minimum base future scenario should be 2031, as per MRWA ROMS modelling, as the proposal is located within a precinct of significance for the State Government. The assessment needs to be amended to reflect the modelling for this option.	Please advise why the 2031 scenario was not used in the modelling.	The appropriate planning horizon for this redevelopment, as defined by the Transport Impact Assessment Guidelines, is development + 10 years. In addition, trip generation within the QEIIIMC-UWA precinct is restrained by the parking cap. The use of ROM24 data is appropriate at a strategic level only, to understand the function of regional roads. This would include roads such as Winthrop Avenue and Stirling Highway. However, ROM24 does not provide useful information regarding the local network, which would include Monash Avenue and Verdun Street, due to the coarse zoning of the model.

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
5	<p>A review of the trip generation assumptions associated with the proposal indicate that the trip rates used for the hospital and medical centre uses has confirmed following a review of the ITE Trip Generation Manual 10th Edition rates that they are too high and incorrectly estimate traffic demands to and from the site. These rates are not reflective of the constrained parking supply on the overall QEII Activity Centre site as well as access to and from the site via established public transport, cycling and waling infrastructure. Justification for these rates needs to be provided in an updated assessment. In addition, a breakdown of these traffic projections to separate out staff movements into and out of the site during the weekday a.m., school p.m. and p.m. peak hours is required.</p>	<p>Please provide justification for these rates in an updated assessment.</p>	<p>The generation rates used for the proposed development can rightly be considered conservative in the context of the constrained parking environment.</p> <p>However, as comments above indicate, there is concern regarding the impact of redevelopment on the adjacent road network. As such, unconstrained rates have been used to illustrate the sufficiency of the existing network.</p> <p>Impact to the network is therefore expected to be even less than identified in the TIA.</p>
6	<p>The trip distribution and assignment of future traffic via the Verdun Street crossovers in the order of 50% needs to be justified as it is understood that only staff, delivery and service movements will be accessing the site via this frontage.</p>	<p>Please justify the trip distribution and assignment of future traffic for Verdun Street for new vehicle movements.</p>	<p>The assumption of 50% traffic along Verdun Street is considered to be conservative.</p> <p>However, staff movements will comprise a substantial component of travel during the AM and PM peak periods, and therefore these accesses may be disproportionately used during peak times.</p>
7	<p>Figures 6.1 through 6.4 are extremely unclear and hard to read and should be reissued in either electronic format or via a larger scale.</p>	<p>Please provide clearer copies of these figures.</p>	<p>Agreed.</p>
8	<p>It is unclear if the impacts of the recently commissioned Perth Children's Hospital have been included in the assessment as the background ambient base volumes documented</p>	<p>Please advise if the Perth Children's Hospital traffic volumes have been included in the assessment of the ambient</p>	<p>The impact of the PCH development has been included in planning for the QEIIIMC-UWA precinct and is reflected in the upgrade of the</p>

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
	<p>in the report would reflect changes to traffic demands on the road network to include these demands. If this is the case, the ambient base volumes should be extrapolated to arrive at a base set of traffic figures which includes the increased traffic associated with the PCH for the existing, near future (10+ year) commissioning of development and the 2031 scenario.</p>	<p>base volumes documented. If not please advise why. If yes, please advise the base set of traffic figures including the increased traffic associated with the PCH in the 2031 scenario.</p>	<p>Aberdare Road roundabout and Winthrop Avenue.</p> <p>The function of the parking cap is to restrain traffic growth in the precinct and both QEIMC and HPH have maintained parking within those limits.</p> <p>Access for PCH staff and visitors is overwhelmingly supplied from Winthrop Avenue to the multi-story car park, via Aberdare Road or Monash Avenue. Traffic growth to the west of Hampden Road is not anticipated.</p> <p>The PCH did not open until after the TIA was submitted, and direct impacts could not be measured.</p>
9	<p>A detailed review of the SIDRA assessment results for the Smyth Road/Monash Avenue and Smyth Road/Verdun Street has been undertaken for the existing, near future and 2028 scenarios as documented in the report. The review indicates that the SIDRA results for the Smyth Road/Monash Avenue are flawed and that the intersection will operate significantly over practical capacity during the respective peak hours as a result of a combination of the constrained geometry and lack of outbound right-turning capacity resulting in a significantly diminished residual capacity to accommodate additional demands.</p> <p>In order to validate the SIDRA results documented in the report, a detailed series of gap acceptance surveys during the respective peak demand periods (a.m. peak period: 7:00 to 9:00a.m.,</p>	<p>Please provide a detailed series of gap acceptance surveys during the respective peak demand periods.</p>	<p>The findings of this TIA clearly indicate that this intersection will function beyond its capacity for the 2028 scenario.</p> <p>However, this cannot be attributed to the proposed development, which contributes between 2 and 5 vehicles to the critical right-turn movement.</p> <p>It is noted that the City has already identified this location as an issue and has recommended upgrade to a roundabout form under the "Roads to Recovery" program.</p>

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
	<p>school peak period: 2:30 to 4:00p.m. and p.m. peak period: 4:00 to 6:00 p.m.) are required to ascertain the base existing practical outbound right-turning capacity on the Monash Avenue approach to the intersection. These surveys will ascertain the delays associated with the potential queuing downstream from Smyth Road along Monash Avenue during these peak periods.</p> <p>A detailed site visit to the intersection of Smyth Road/Monash Avenue during the weekday peak periods on Thursday 9th August 2018 indicated that there is significant downstream westbound queuing occurs during these times, and in particular, during the school p.m. peak period under existing conditions and as a result, significant delays experienced by vehicles wishing to turn right into Smyth Road. The addition of site-generated traffic associated with the proposal may exacerbate these existing conditions and result in significant impacts to practical capacity at the proposed crossover for inbound and outbound vehicles.</p> <p>The undertaking of these surveys is conventional traffic engineering practice for complex projects in established urban areas and has not been undertaken.</p>		
10	<p>The predicted future daily traffic volumes on Verdun Street, however, will likely exceed the practical daily capacity for this road with anticipated future daily volumes estimated to range between 2,800 and 4,100 vpd (based upon data documented in Cardno's report) and while</p>	<p>Please address this point.</p> <p>Can additional vehicle movements be prevented along Verdun Street through reduction in the staff vehicle movements</p>	<p>Traffic growth attributed to Verdun Street is, as previously stated, conservative. Even so, the traffic increase that can be attributed to the HPH development on any section of Verdun Street is less than 60 vehicles in the peak hour. Traffic generation outside of this period is expected to</p>

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
	the intersection of Smyth Road/Verdun Street will operate at acceptable Levels of Service during the respective peak hours, the access points along the northern frontage of the site constrained to staff and service/delivery movements only to minimise impacts on this road network link.	over time with the travel behaviour program?	be very low, as the use of Verdun Street accesses is restricted to staff and deliveries. As such, any significant growth in traffic along Verdun Street would not be associated with the HPH development. The proposed parking management system and continued travel behaviour program will result in a reduction in peak period staff trips, though this private vehicle mode shift has not be included in the impact assessment.
11	A SIDRA assessment for each of the primary access crossovers to Monash Avenue for each of the respective a.m., school p.m. and roadway p.m. peak hours.	Please provide SIDRA assessment accordingly.	SIDRA intersection assessments for the AM and PM peak periods have been included for the key access affected by the redevelopment. Other access points are not affected by this proposal and so have not been included.
12	The amended assessment should include consideration of the cumulative impacts of the future full development of the QEII Precinct, inclusive of any nearby development proposals and additional development on the QEII site as part of the future baseline assessment. This is standard traffic engineering practice and is outlined as one of the basic considerations in the WAPC Transport Impact Assessment Guidelines.	Please update the assessment to include full development of QEII precinct and LPS3 density increases accordingly or advise why this is not required.	Analysis of the full development of QEII and LPS3 is significantly beyond the requirements of the proposed redevelopment of the HPH site. A growth factor has been assumed to account for increases in traffic in the adjacent network, which has identified a constraint at the Smyth/Monash intersection. No other intersection or access point is shown to be approaching capacity. Growth within the QEIIMC-UWA precinct is constrained by the parking cap, with road network planning already implemented to accommodate the recent growth up to the parking cap.
13	Details relating to the servicing, loading and delivery protocols have not been provided in relation to anticipated demand volumes, delivery	The City can condition this as part of a development approval.	Agreed.

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
	<p>periods and other protocols relating to management of vehicle routing, parking, overflow management and noise. A detailed Loading, Servicing and Delivery Management Plan consistent with Council and 'best practice' protocols is required. In particular, this plan should outline how the servicing of the site will minimise impacts to both the Monash Avenue and Verdun Street frontages. Access by rubbish trucks has also not been addressed in the report nor has the review of the compliance of the proposed multi-deck car parking structure with Australian Standard AS 2890.1: Off Street Parking. The service, delivery and rubbish collection vehicles all have the potential to impact: on-site circulation by other vehicles as well as vehicles attempting to enter the site from Monash Avenue and Verdun Street resulting in localised congestion on an already congested road serving direct residential frontage along Verdun Street as well as the Monash Avenue frontage</p>		
14	<p>A road safety design audit should be undertaken to identify the any roadside and on-site safety and conflict points and any modifications to existing median islands and road seal, line marking and signage which may be required to accommodate site-generated traffic.</p>	<p>Please provide a road safety design audit or advise why this is not required.</p>	<p>The proposed development results in a minor increase in traffic movements. There is no significant history of crashes along Monash Avenue adjacent to HPH and no changes have been identified at the proposed access point.</p> <p>All works are contained within the site, with very little impact on the boundary road.</p> <p>In the absence of any prior history or comprehensive change, there is no nexus to undertake an RSA.</p>

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
15	No sightline analysis has been undertaken in accordance with Austroads Guide to Road Design – Part 4A: Signalised and Unsignalised Intersections. This will be required due to the risks associated with exiting the proposed multi-deck car parking structure.	Please provide a sightline analysis for the proposed new car parking areas or advise why this is not required.	There are no obstructions at the entry/egress to the car park. Pedestrians have priority at the indicated zebra crossing. Sightline assessment is therefore not required.
16	The existing bitumen widths of Smyth Road and Monash Avenue, respectively, are inadequate to accommodate a localised widening to accommodate a northbound right-turn pocket into Monash Avenue from Smyth Road or a simultaneous outbound left- and right-turning lanes on the Monash Avenue approach into Smyth Road which would be warranted under the redevelopment scenario. These improvements would assist in mitigating downstream queuing for northbound vehicles on Smyth Road and westbound vehicles on Monash Avenue.	Please advise why you believe that right-turn pocket into Monash Avenue from Smyth Road or outbound left and right turning lanes on Monash Avenue is not warranted.	The increase in traffic from HPH is minimal at this intersection. Traffic delays are predominantly as a result of background traffic, including from QEII MC. An appropriate solution has been recommended, consisting of a roundabout, and consistent with the City's own application for upgrade.
17	A review of the car parking assessment indicates that the proposed overall supply is consistent with both the City's Town Planning Scheme No. 2 and endorsed WAPC policies and precinct plans. However, it should be noted that in order to manage the future car parking supply appropriately that a detailed Car Parking Management Plan is required prior to commissioning of the development. The letter prepared by Cardno and submitted by Element in August 2018 is insufficient in detail and provides no guidance with regard to priority allocation of car parking, access control, parking guidance mechanisms, wayfinding or travel demand	A Parking Management Plan and Travel Behaviour Change program are required to be provided and implemented as a condition of development approval. These documents should address the points raised by the City of Nedlands consultant.	Agreed.

	CoN Consultant Comment on TIA	CoN Request	Applicant Response
	<p>measures which will encourage a shift in preference to non-motorised modes.</p> <p>The Green Travel Plan: 2014-2018, prepared by Cardno in 2014, requires significant updating to reflect existing changes to infrastructure and demand generators in the overall QEII precinct area such as the Perth Children's Hospital as it is no longer relevant to the area. Consideration of the establishment of a shuttle bus service between the QEII bus station and the Hollywood Hospital should be given in order to maximise non-motorised access to the site and minimise demands on car parking. In particular, the delivery of a significant number of medical consulting rooms will likely results in an unacceptable impact on on-street car parking in the vicinity of the site, most notably on Monash Avenue and Verdun Street particularly for vulnerable users such as the elderly, disabled and parents with children who are unable to walk the 400m to 500m distance from the higher order frequent bus services at the QEII bus station and/or Hampden Road. Fully accessible shuttle services would allow for this element of the market to be captured and would potentially limit the impacts to short-term public car parking on-street.</p>		

CITY OF NEDLANDS**MUNICIPAL HERITAGE INVENTORY
PLACE RECORD FORM****LGA Place No: H1****Hollywood Private Hospital****Photograph of the place****Hollywood Private Hospital in 1998**

LOCATION	
HCWA Reference Number	
Other Reference Number	
Name of Place	Hollywood Private Hospital
Other names	Hollywood Repatriation Hospital, 110 Military Hospital
Address	Monash Ave
Suburb/Town	Hollywood
Local Government Authority	City of Nedlands

OWNERSHIP & LAND DESCRIPTION				
Owner	Address	Phone/fax	Status	No
Ramsey Healthcare Pty Ltd	Hollywood Private Hospital Monash Ave Hollywood 6008	9346 6664		
Reserve No.	Lot/Location No	Plan/Diagram	Vol/Folio	No.

Item 13.6 - Attachment

PERIOD	Inter-War
Design Style	Various
Construction Date	1942
Source/Details	Western Veteran, 1994

USE(S) OF PLACE	
Original	Repatriation Hospital
Present	Private Hospital
Other	

HISTORICAL NOTES

Hollywood Hospital was built during World War II and opened in 1942 under the name 110 Military Hospital. In 1947 control of the hospital passed to the Repatriation Commission to provide acute care for veterans and war widows. At this time it was renamed the Repatriation General Hospital Hollywood (affectionately known as 'Repat'). The hospital continued to fill this repatriation role but in the 1970s changes began to occur.

In 1970 a Respiratory Function Unit was established and throughout the rest of the 1970s, after affiliation with the University of W A, many other developments were made. Outpatients, orthopaedic, pathology, radiology and occupational therapy services were all introduced. The establishment of these specialist services along with its new teaching role and shared facilities with nearby QEII Medical Centre necessitated the intake of non-veteran patients. In 1979 Repatriation General Hospital Hollywood was the first hospital in W A to receive accreditation by the Australian Council on Healthcare Standards (ACHS). It has held this accreditation continuously and in 1989 became only the third hospital in Australia to receive the ACHS five year accreditation for its standard of excellence.

Throughout the 1980s new departments continued to open up to improve care. These included palliative and coronary care units as well as new operating suites and surgical and intensive care wards. Further changes occurred with the transfer of the hospital to the private sector in 1993. The hospital began operating under the name Hollywood Private Hospital on 24 February 1994.

DESCRIPTION

Hollywood Repatriation Hospital is now Hollywood Private Hospital. It is a two storey brick and tile building facing onto Monash Avenue. It is a simple building with an entrance portico projecting from the main entrance. It has vertical timber sliding sash windows closely spaced with one and a half narrow split brick piers. Behind this building is a block of the original hospital building erected in 1942. Many other buildings were built at a later date.

CONDITION	
INTEGRITY	Many changes in progress (1998)

ASSOCIATIONS**ASSOCIATION TYPE**

STATEMENT OF SIGNIFICANCE

The Hollywood Private Hospital has historic, social and scientific cultural heritage value. For over 50 years it has provided a vital medical service to first veterans and then non-veteran patients. A study of the history of development in the hospital shows a growth of services and the massive changes that have occurred in medical practices since World War II.

Item 13.6 - Attachment

HISTORIC THEME/Subtheme**CATEGORIES OF SIGNIFICANCE**

Community Efforts/ <i>Hospitals</i>	Historic
	Social
	Scientific

MANAGEMENT RECOMMENDATIONS

Management Category: C

LISTINGS**SUPPORTING INFORMATION/BIBLIOGRAPHY**

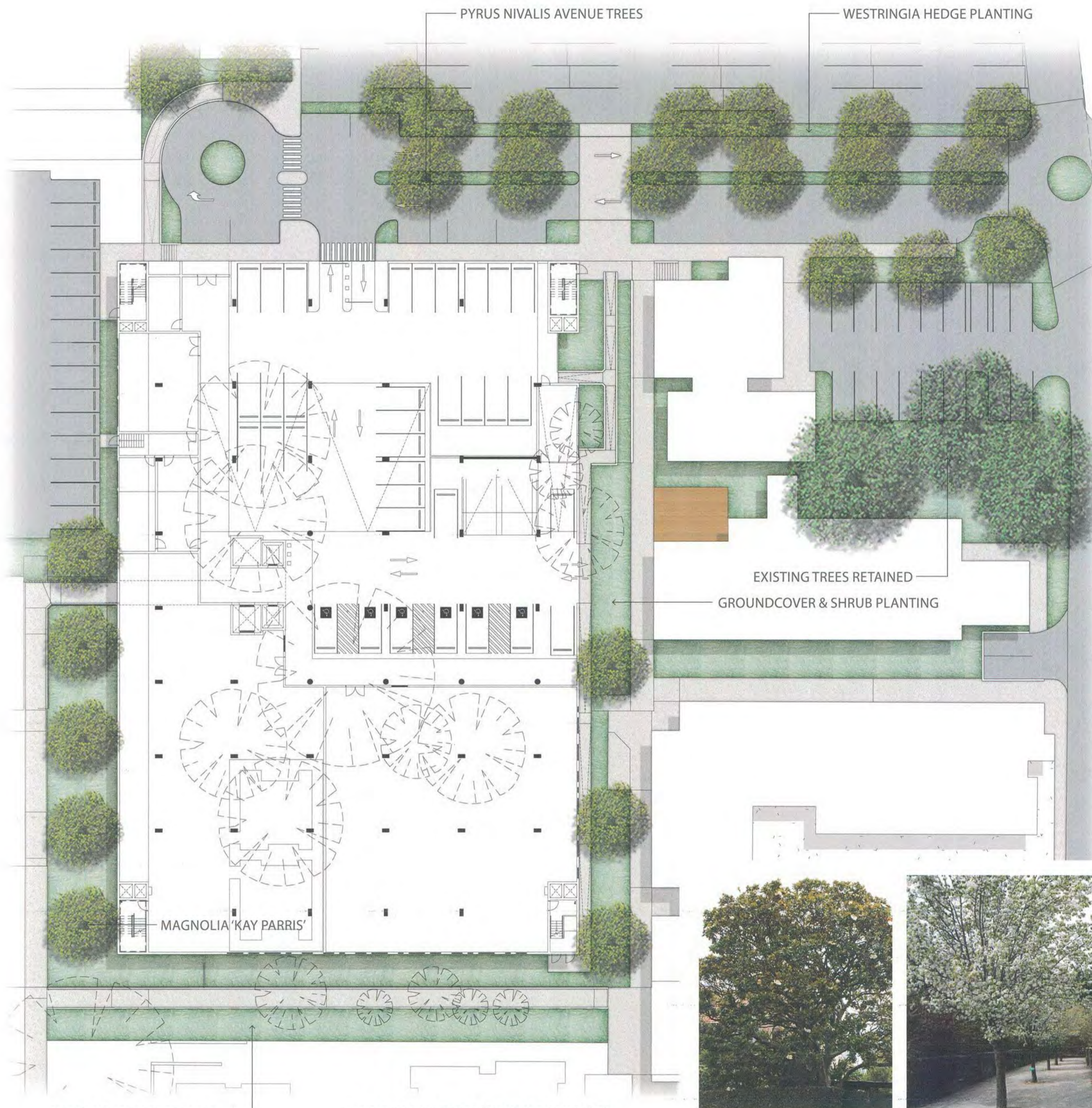
- Western Veteran Special Edition. Newspaper Article. p.4 1994.



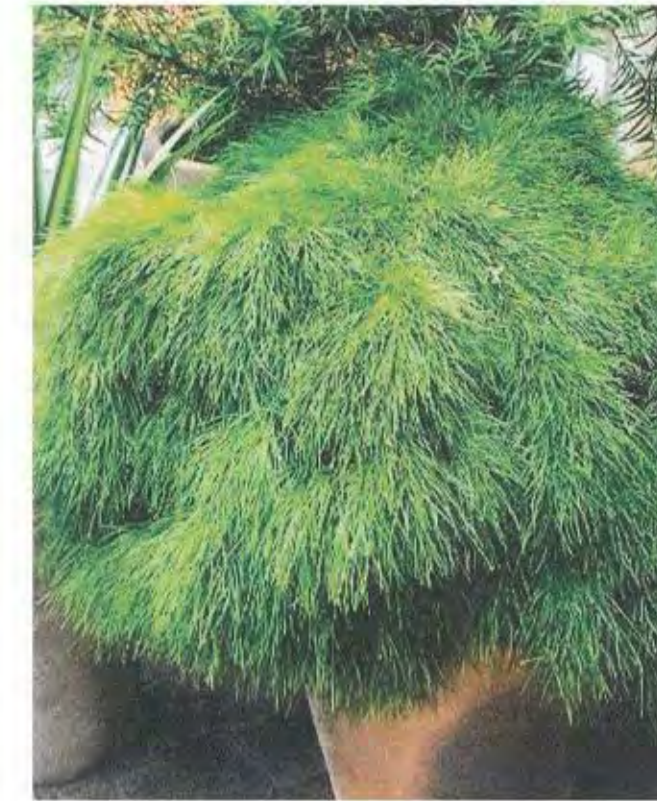
The original Hollywood Repatriation Hospital opened in 1942.



Hollywood Military Hospital during construction August 1941.
(City of Nedlands Local Studies Collection)



NOTE: EXISTING TREES (SHOWN DASHED) TO BE REMOVED, CONSIDER TRANSPLANT OR SELL OFF FOR OTHER PROJECTS



ACACIA 'LIMELIGHT'



ADENANTHOS CUNEATA



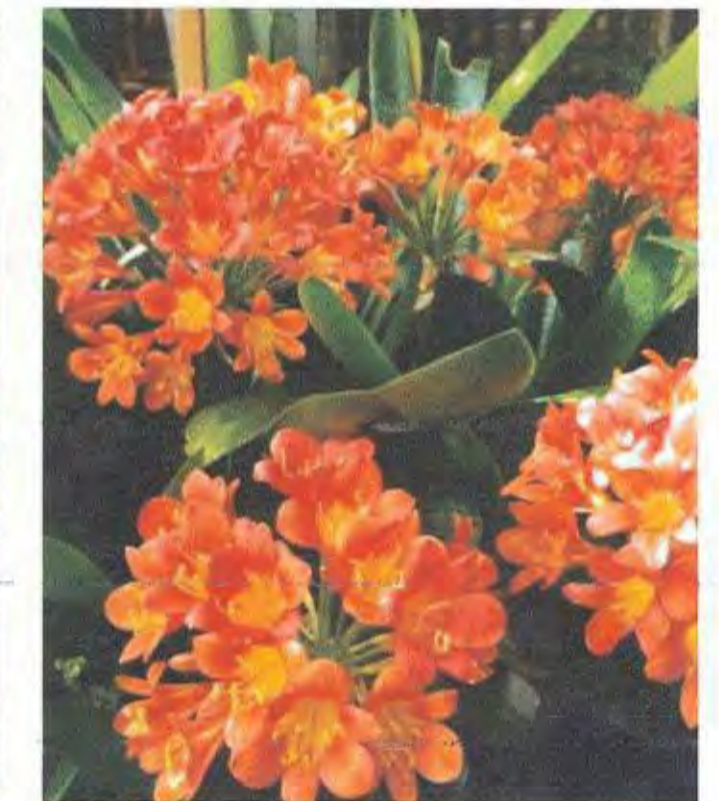
ANIGOZANTHOS FLAVIDUS



CASUARINA 'COUSIN IT'



ASPIDISTRA ELATIOR



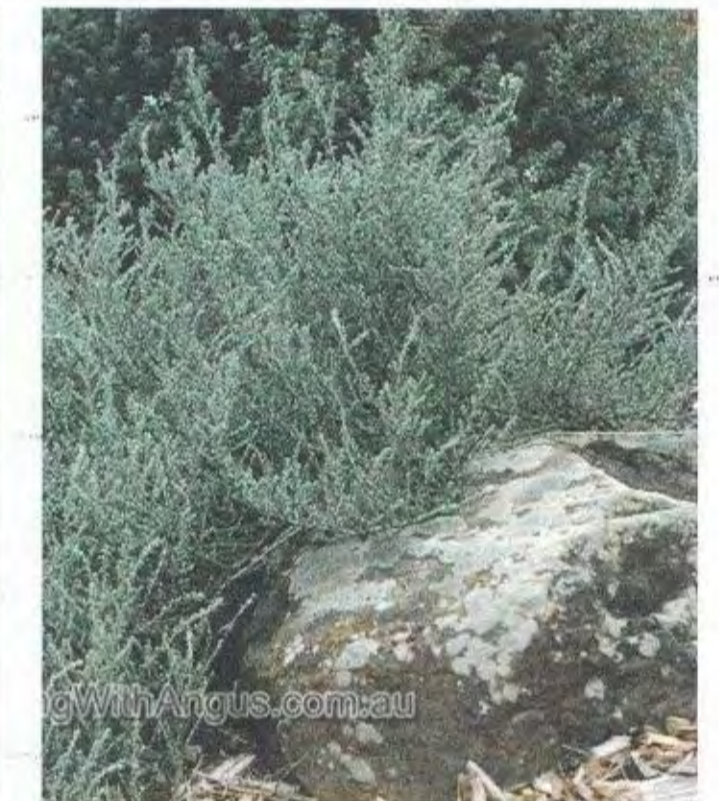
CLIVIA MINIATA



EREMOPHILA GLABRA



GREVILLEA 'GREEN CARPET'



OLEARIA 'GHOST TOWN'



MAGNOLIA 'KAY PARRIS'



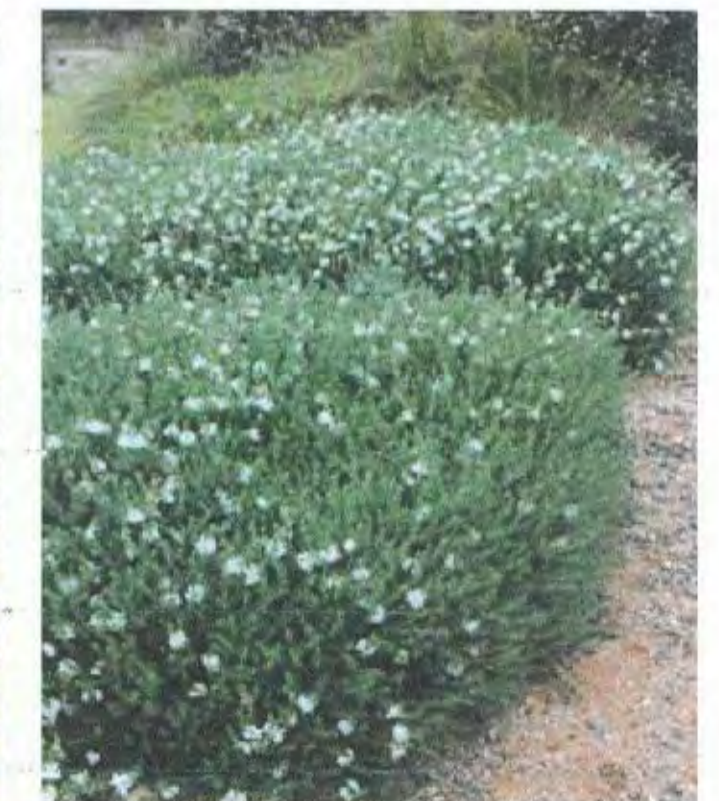
PYRUS NIVALIS



PIMELEA FERRUGINEA



RHAPHIOLEPIS INDICA



WESTRINGIA MUNDI

HOLLYWOOD PRIVATE HOSPITAL

LANDSCAPE CONCEPT PLAN
JULY 2018

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LANDSCAPE ARCHITECTS

414 ROKEBY RD SUBIACO WA 6008
T: (08) 9388 9566 E: mail@plane.com.au

Summary of Submissions:

The tables below summarise the comments received during the advertising period of the proposal, together with the City's response to each comment.

Comments received in support:	Officer Technical Comment:
<u>General</u> <ul style="list-style-type: none"> The development is not opposed. We are happy for it to proceed. No objections as this development is pretty much in the centre of the site. 	<p>Noted.</p> <p>Noted.</p>
<u>Parking</u> <ul style="list-style-type: none"> Additional parking is supported to take cars off the streets and provide parking for people who need to drive (people from the country, unwell or mobility challenged) The train station is too far away and there is no bus to the City in this area by any direct route. 	<p>Noted.</p> <p>There are frequent direct bus routes to the City (103 and 950) which has stops on Hampden Road and Monash Avenue to the east of the subject property, less than 200m to the property. This can service regular visitors to the site and those not mobility restricted.</p>
<u>Traffic</u> <ul style="list-style-type: none"> Residents adjacent to Monash Avenue may be concerned about increases in traffic, not too concerned about increases on Verdun Street. 	<p>There is minimal increase proposed in terms of traffic accessing the site from Verdun street and the traffic will be within the local road capacity for traffic movements per day.</p>

Comments Received neither in Support nor Objection:	Officer Technical Comment:
<u>Traffic</u> <ul style="list-style-type: none"> Concerns about increase in traffic on upper part of Verdun Street between Quadrangle and Smyth Road. Currently note increase to local traffic along Verdun Street and other local roads in the past 12 months. Previous developments at QEII and Hollywood Hospital in the last 3-5 years have resulted in significant amounts of construction traffic impacting amenity of residents in terms of noise and traffic congestion. 	<p>Noted.</p> <p>Noted.</p> <p>Noted.</p>

<ul style="list-style-type: none"> • All construction traffic entering the property should be via Aberdare Rd to Gairdner Ave and then north along the lower eastern end of Verdun Street to specially widened/ reconfigured entrances no. 6 and no. 7 to the new building site to prevent traffic congestion in the upper end of Verdun Street. • The impact of the increased traffic over the past 12 months have has impact on local residents and the Hollywood Primary School with children less likely to walk to school with increases in traffic and difficulty crossing local roads. • The south side of this lower part of Verdun St (Gairdner Ave to Kitchener St) is occupied by either QEII or Hollywood Hospital and would be largely unaffected by an increase in traffic during the build. • Can the City confirm if a Traffic Impact Assessment has been undertaken as part of the Proposed Development Application? If this has been prepared, it is requested that a copy be provided to the QEIIMC Trust and relevant neighbouring properties impacted by the increased traffic to provide comment. • Can the City confirm if the Proposed Development has any future impact on the surrounding road network? Can the City confirm if the Traffic Impact Statement prepared as part of the Proposed Development Application incorporates the recent vehicle increase and future increase to developments in the close proximity of HPH i.e. Perth Children's Hospital (PCH) and the developments under construction to the South of HPH? 	<p>This is recommended to be conditioned as part of the development approval.</p> <p>Noted.</p> <p>Verdun street is a local road with a limited capacity and therefore restriction to staff and deliveries is required to ensure the road hierarchy is maintained and the road design does not cause safety issues. Monash Avenue has the capacity for the additional traffic movements proposed by this development as demonstrated by the applicant's traffic report.</p> <p>A TIA has been prepared and vetted by the CoN, DoT and DPLH. This document is not available for public comment due to its technical nature but will be available as an attachment to the RAR.</p> <p>The impact is within the road's current and 2031 built our capacity.</p>
<p><u>Parking</u></p> <ul style="list-style-type: none"> • Do not support the use of Highview park for temporary parking 	<p>I can confirm there is no proposal to use Highview Park for construction parking.</p>

<ul style="list-style-type: none"> • Support the requirement for greater use of public transport by Hollywood Hospital staff. • Existing car parking is not well utilised and traffic flow within the property is poorly directed. • No overflow car parking supported at Hollywood Bowls Club. • Support greater use of public transport by hospital staff as part of approval. • Please confirm that the applicants have withdrawn their request for more than 1800 car parking bay to be provided. It is acknowledged that the parking cap query may now be redundant or be simply for clarification of the current HPH approach considers any constraints to emergency vehicle access that may be caused by the Hollywood Application • As outlined under the Current Master Plan section 6.4.2, Future Access and Parking, a small percentage of the parking will be retained at grade, primarily along Monash Avenue. Can the City confirm, will the Applicant be removing all current on-grade staff parking located north of the proposed development and other on-grade parking in line with the aspirations of the current Masterplan? • Can the City confirm whether there are any future provisions for parking proposed on the HPH site other than those listed above? • We seek assurance that sufficient parking capacity is provided for construction workers, visitors and workers at the new centre so that there is no reduction in the availability of parking for club members and visitors attending training, games and social events. 	<p>A condition of development approval is for the hospital to implement a parking management plan and travel behaviour program to encourage greater use of alternative transport methods – similar to QEII.</p> <p>Noted. The above measures should encourage greater utilisation of existing car parking on site.</p> <p>Noted. Existing time limits are reviewed regularly and if parking in an area becomes a problem, the City’s rangers can attend site to review any issues as they may arise.</p> <p>Noted.</p> <p>The applicants have recalculated the amount of car parking – excluding service and delivery bays, ambulance bays and ACROD bays bringing the number of bays proposed to be provided down to 1784 bays. The DoT has supported this with conditions of development approval.</p> <p>No removal of the staff parking to the north of the proposed development is proposed as part of this application – please refer to the site plan.</p> <p>Not as part of this application.</p> <p>The City has recommended a condition of development approval that the applicant prepare a construction management plan which will need to address parking during the construction process for builders and contractors. This will only be acceptable to the City if parking does not cause disruption to normal functions within the area such as primary school functions and use of Highview Park for public/sporting groups being maintained.</p>
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<p><u>Access</u></p> <ul style="list-style-type: none"> • Current access configuration requires heavy trucks needing to back into Lupin Hill Grove in order to be able to access the building site. • Access to be limited post construction to Monash Avenue for the medical centre • We have interest in the access, parking cap and congestion aspects of the Hollywood Application, considering the current access constraints at QEIMC • We are concerned generally about access to and around the Hollywood and QEIMC locality for residents, staff and visitors of all institutions in the area. • The CoN should consider the potential congestion and road use impacts the Hollywood Application proposal may have on the immediate local communities (Nedlands, Perth, Subiaco and wider afield) • The CoN should give due consideration impact to the local streets and potential additional congestion on Verdun Street and Monash Avenue. • The CoN should consider and comments on the potential need for mass public transport system into the QEIMC Precinct in the shorter term to assist with access to the QEIMC precinct in light of the QEIMC parking restriction and the Hollywood Application and the parking caps in the precinct generally • The Proposed Development Application provides access from Monash Avenue with egress shown from the two designated locations outlined under the Current Master Plan. Can the City confirm if these two access points are to be service access only or provided as access to the Proposed Development? And if this is the case has the Applicant considered the impact to Verdun Street for surrounding neighbours? 	<p>Noted – a condition requiring reconfiguration of the existing access on Verdun Street is recommended accordingly.</p> <p>Access will be limited to Monash Ave for visitors, however staff and deliveries will still be permitted to access the site from Verdun Rd. Noted.</p> <p>Noted.</p> <p>Noted – the applicant has provided a TIA which the City, DPLH and DoT have vetted.</p> <p>Noted – see above comment.</p> <p>Noted – conditions recommended as per DoT advice for Travel behaviour program and Parking Management Plan.</p> <p>The City can confirm that visitor access is from Monash and staff and service access to Verdun will be retained. Verdun Street residents were consulted as part of this application.</p>
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<ul style="list-style-type: none"> I would suggest that vehicular movement within the Hospital grounds needs improvement and the entrances on Verdun St be utilised to the benefit of reducing a portion of traffic along Monash Ave. 	<p>Verdun street is a local road while Monash Ave is a local distributor and therefore has a higher capacity for traffic. Additional traffic from visitors along Verdun street is not supported for this reason, with Monash Avenue to retain the majority of vehicle movements to ensure compliance with the road hierarchy requirements.</p>
<p><u>General</u></p> <ul style="list-style-type: none"> The numerous developments at the property and QEII may have contributed to property prices dropping in the area. Observed trend of additional traffic in local roads supported as part of new developments provision of additional car parking as the number of daily services for bus routes 24 and 25 are reduced. During construction on this site there should be no impact to the operations of the adjacent Hollywood Primary School. We have concerns regarding the implications of the Hollywood Application may have on the new QEIIMC Trust QEIIMC Reserve Master Plan (and seeks to ascertain the parameters of the final approval of the Hollywood Application (in whatever form) so as to inform the QEIIMC Trust Master Plan) The CoN should apply appropriate conditions to the Hollywood Application, as may be reasonable. The location of the Proposed Development varies from the Current Master Plan. The indicative building footprint is well away from the Proposed Development location. The Proposed Developments floor area is approximately 4500sqm at Level 1 whereas the Current Master Plan proposes a floor area of 1720sqm. Therefore, the floor area of the Proposed Development varies from the Current Master Plan. 	<p>This statement is not able to be taken into consideration in considering the development application.</p> <p>Additional car parking is proposed to be provided, however a condition of development approval is recommended to have a parking management plan and travel behaviour program implemented to increase public transport patronage by staff to the site in lieu of by car.</p> <p>Noted – no impact of operations proposed.</p> <p>The DPLH was advised of this application and advised a clause 32 resolution may be enacted in the future to require dual determination for all applications in this area. Further to this, the applicants have obtained preliminary permission to prepare an LDP for the site to replace the master plan. QEII will be invited to comment on this proposed LDP. This application will be determined by JDAP and the City’s report has listed the recommended conditions of development approval.</p> <p>Noted.</p> <p>The variation to the location of the building is discussed within the report. Essentially the purpose of the development locations and building envelopes was to demonstrate how the built-out scenario will result in compliance with the masterplan document. The development is compliant with the height, plot ratio and car parking cap and therefore variation to the development area and building envelope is considered acceptable.</p>

<ul style="list-style-type: none"> • The Proposed Development has an RL to the highest point of the development at RL 36.626 whereas the Current Masterplan proposes an RL of 35.000. This equates to an increase above the Current Masterplan of 1.626m. • Can the City confirm if a Planning Report been undertaken as part of the Proposed Development Application; and if so can this be issued for review to enable both the QEIMC Trust and the surrounding neighbours to make an appropriate comment? • It is Council's intention that the modifications to the Masterplan shall require amendment to the Masterplan? • Will the City be proposing that HPH undertake a redesign of the Current Master Plan as the Proposed Development varies greatly from the Current Master Plan? 	<p>The purpose of the FFL is to limit building height and the number of storeys. The development is larger than the building footprint, and under the permitted building height to compensate.</p> <p>A planning report has been prepared by the applicant. This document is not available for public comment due to its technical nature but will be available as an attachment to the RAR.</p> <p>The master plan is somewhat outdated and therefore, the City has recommended that an LDP is prepared to replace the master plan before another application is considered.</p> <p>Not for this application but for future applications, an LDP will need to be prepared and adopted prior to consideration of further applications.</p>
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Comments Received in Objection:	Officer Technical Comment:
<p><u>General</u></p> <ul style="list-style-type: none"> • The title “Hollywood Consulting Rooms” is misleading. This is a three-storey car park with two floors of consulting suites. • Development does not sit in the indicative development area and building envelope. 	<p>The plans clearly show the development being 5 storeys and detail the location of car parking, consulting rooms and future hospital services. The ground floor is also a combination of services for the building, radiology centres and car parking with the two levels above being car parking only.</p> <p>The variation to the location of the building is discussed within the report. Essentially the purpose of the development locations and building envelopes was to demonstrate how the built-out scenario will result in compliance with the masterplan document. The development is compliant with the height, plot ratio and car parking cap and therefore variation to the development area and building envelope is considered acceptable.</p>
<p><u>Access</u></p> <ul style="list-style-type: none"> • The service access from Verdun Street which will be used for construction traffic access is poorly designed and fundamentally unsafe as large vehicles approaching from the east on Verdun Street are unable to turn left into the access. 	<p>The City supports the re-orientation of the vehicle access to Verdun Street to allow access from an eastern direction and remove any three point turns in residential streets. Additionally, the City also supports access to the property for construction vehicles being</p>

<p>Instead, they drive up to Lupin Hill Grove and make a three-point turn which requires these vehicles to reverse onto incoming traffic on Verdun Street and then drive back and turn right into the access way.</p>	<p>restricted to access from an eastern direction only to minimise impact on the residential area.</p>
<p><u>Traffic</u></p> <ul style="list-style-type: none"> • The consequence of the additional parking is increased traffic in Verdun Street which has already has traffic due to previous expansions of the Hollywood complex and the QE2 development and the fact it is now used as a cut through to avoid traffic tail backs at the roundabout at the intersection of Smyth and Aberdare roads. • Construction will likely temporarily reduce staff parking and so put pressure on local roads. (This would be less likely to be the case if the footprint was smaller). • In addition, there may be a request to make use of Highview Park. This would reduce the amenities in what is now a densely populated area (compared to most of Nedlands). Since there are future buildings planned for the Hollywood site temporary would have a dubious meaning and may become permanent by default. • I do not support the proposal in its current form due to the large number of parking spaces which creates the need for a larger footprint and puts pressure on the adjacent roads during construction and once built. 	<p>The development does not propose public access from Verdun street with current and anticipated traffic to be within the local road network capacity. This is confirmed by the applicant's traffic impact assessment, prepared by traffic consultant and vetted by the City's traffic consultant.</p> <p>Construction traffic can be managed through a construction management plan.</p> <p>There is no proposal to use Highview park as temporary parking.</p> <p>The applicant has prepared a TIA to demonstrate the impact of the development on the traffic in the existing and proposed built out scenario. The CoN, DoT and DPLH have vetted this document and can confirm that the development is acceptable.</p>
<p><u>Parking</u></p> <ul style="list-style-type: none"> • The proposed car parking as part of the development consequently leads to approximately 160 parking places in excess of the 1800 permitted parking bays. 	<p>When the consultation commenced, the figure for the number of bays was 1960, however upon revision of this figure and the permitted exclusion of service and delivery bays, ambulance bays and ACROD bays the number of car parking bays is actually 1784 and therefore under the 1800 cap.</p>

Applicant Response to Submissions:

The Table below contains each submission received during the advertising period of the proposal together with the Applicant's response to each submission.

	Summary of Public Submission	Applicant Response
1	Comment Number of car parking bays exceeding 1,800.	As advised by letter dated 10 August 2018 a review of the parking on site has confirmed that the number of car bays on site is now compliant at 1,784 bays.
2	Comment Traffic volume and speed along Verdun Street (<i>and surrounding network</i>).	Access to Verdun Street is to remain unchanged and will still to be controlled and limited to staff and deliveries. The traffic volumes have been assessed as part of the TIA where it is noted that existing and future traffic on Verdun Street is well within the capacity of the road, and within that envisaged by the approved Master Plan traffic analysis. It is noted that the approved parking caps have been assessed and considered acceptable to be accommodated on the surrounding road network. Traffic speed is a MRWA and Police matter.
3	Comment Access issues from Verdun Street from construction traffic.	Construction impacts and access will be addressed through the preparation and approval of a Construction Management Plan (CMP) anticipated to be imposed as a condition of development approval. Ramsay will work with the City to ensure due regard is held for all issues such as traffic movements, amenity impacts, safety (particularly for school children), start and finish times, worker parking, operational issues etc. as part of ensuring compliance with this condition.
4	Comment Concern over use of Highview Park for temporary parking.	Refer to submission 3. above.

	Summary of Public Submission	Applicant Response
5	<p>Support</p> <p>The development is not opposed. We are happy for it to proceed.</p> <p>Proposed car parking number should be strongly supported by the City. Adequate parking should not be constrained by artificial limits. Providing for the parking needs is essential.</p>	<p>Noted and agreed.</p>
6	<p>Support</p> <p>No objections as this development is pretty much in the centre of the site.</p> <p>Comment regarding traffic on Monash Avenue and Verdun Street.</p>	<p>Noted. Please refer to response to submission No. 2.</p>
7	<p>Objection</p> <ul style="list-style-type: none"> • The title “Hollywood Consulting Rooms” is misleading. This is a three storey car park with two floors of consulting suites. • This consequently leads to approximately 160 parking places in excess of the 1,800 permitted parking bays referenced in your letter. • It also results in the other proposed variations to the Masterplan you reference; not sitting in the indicative development area and building envelope etc. • The consequence of the additional parking is increased traffic in Verdun Street which has already has traffic due to previous expansions of the Hollywood complex and the QE2 development and the fact it is now used as a cut through to avoid traffic tail backs at the roundabout at the intersection of Smyth and Aberdare roads. 	<p>The land use of the proposed development is consistent with the Hospital use for the site, including its individual components.</p> <p>Please refer to response to submission No. 1.</p> <p>The Masterplan is a Policy Document which outlines the general development criteria for which an application should have due regard. The proposed development is a five storey development central to the site where six storeys is permitted and in an area where future redevelopment is contemplated by the Masterplan.</p> <p>Please refer to response to submission No. 2.</p>

	Summary of Public Submission	Applicant Response
	<ul style="list-style-type: none"> • The service access from Verdun Street which will be used for construction traffic access (as it has for recent developments) is poorly designed and fundamentally unsafe. Large vehicles approaching from the east on Verdun Street are unable to turn left into the access and so drive up to Lupin Hill Grove and make a three point turn which requires them to reverse onto incoming traffic on Verdun Street and then drive back and turn right into the access way. • Construction will likely temporarily reduce staff parking and so put pressure on local roads. (This would be less likely to be the case if the footprint was smaller). In addition, there may be a request to make use of Highview Park. This would reduce the amenities in what is now a densely populated area (compared to most of Nedlands). Since there are future buildings planned for the Hollywood site temporary would have a dubious meaning and may become permanent by default. • I am a supporter of Hollywood hospital but I do not support the proposal in its current form due to the large number of parking spaces which creates the need for a larger footprint and puts pressure on the adjacent roads during construction and once built. 	<p>Please refer to response to submission No. 3.</p> <p>The development is compliant with the parking permitted by the Masterplan and a storey below the maximum height permitted.</p>
8	<p>Support</p> <p>The Department of Education has reviewed the document and advises that it has no objection to this proposal. However, it is requested that during construction on this site that no impact is made on the operations of the adjacent Hollywood Primary School.</p>	<p>Noted. Construction issues will be addressed through the preparation and approval of a Construction Management Plan anticipated to be required as a condition of development approval.</p>

	Summary of Public Submission	Applicant Response
9	<p>Comment</p> <p>Potential traffic and noise increase on Verdun Street, including large trucks, that decreased our amenity as residents of the area.</p> <ul style="list-style-type: none"> • Concern over use of Highview Park for temporary parking. • All traffic entering the construction site should be via Aberdare Rd to Gairdner Ave and then north along the lower eastern end of Verdun Street to specially widened/reconfigured entrances no. 6 and no. 7 to the new building site. This will prevent traffic congestion in the upper end of Verdun Street where there are some 13 residences facing south (between Quadrangle and Smyth Rd) and another 4 facing south (between Kitchener St and Quadrangle), and where traffic is already busy with through traffic to the QEII site and to Highview Park. 	<p>Noted. Please refer to response to submission No. 3.</p>
10	<p>Comment</p> <ul style="list-style-type: none"> • The QEII MC Trust Delegate is advised by State Planning that The Hollywood Application initially included a request to exceed HPH 1,800 car bay cap, however HPH has withdrawn this request? • Naturally, the Hollywood Application is of importance to the QEII MC Trust and the wider community. As the entity responsible for the development, management and control of the QEII MC Reserve, immediately adjacent to the Hollywood campus, the QEII MC Trust: <ul style="list-style-type: none"> ○ Has a material interest in the Hollywood application ○ Has a particular interested in the access, parking cap and congestion aspects of the Hollywood 	<p>Please refer to response to submission No. 1.</p> <p>Noted.</p>

	Summary of Public Submission	Applicant Response
	<ul style="list-style-type: none"> ○ Application, considering the current access constraints at QEIIMC ○ Has concerns regarding the implications of the Hollywood Application may have on the new QEIIMC Trust QEIIMC Reserve Master Plan (and seeks to ascertain the parameters of the final approval of the Hollywood Application (in whatever form) so as to inform the QEIIMC Trust Master Plan) ○ Is concerned generally about access to and around the Hollywood and QEIIMC locality for residents, staff and visitors of all institutions in the area. <p>QEIIMC Trust requests the relevant reviewing authority:</p> <ul style="list-style-type: none"> • Considers the potential congestion and road use impacts the Hollywood Application proposal may have on the immediate local communities (Nedlands, Perth, Subiaco and wider afield) • Gives due consideration impact to the local streets and potential additional congestion on Verdun Street and Monash Avenue, for example • Considers and comments on the potential need for mass public transport system into the QEIIMC Precinct in the shorter term to assist with access to the QEIIMC precinct in light of the QEIIMC parking restriction and the Hollywood Application and the parking caps in the precinct generally • Considers the attached comments and questions, providing response and applying appropriate treatments within the development approval process. It is acknowledged that the parking cap query may now be redundant or be simply for clarification of the current 	<p>Noted.</p> <p>Traffic impacts have been assessed as part of the TIA where it is noted that existing and future traffic on local streets is well within the capacity of the road network, and within that envisaged by the approved Masterplan traffic analysis.</p> <p>As above</p> <p>Noted and agreed. We understand the Department of Planning, Lands and Heritage (DPLH) is coordinating the preparation of an Activity Centre Plan for the UWA-QEII specialised activity centre, which should give due regard for any required public transport improvements. Ramsay support the increase in public transport service access to both QEIIMC and the Ramsay Hollywood Hospital site.</p> <p>Noted. The development is compliant with the parking cap.</p>

	Summary of Public Submission	Applicant Response
	<p>HPH approach or considers any constraints to emergency vehicle access that may be caused by the Hollywood Application</p> <ul style="list-style-type: none"> • Applies appropriate conditions to the Hollywood Application, as may be reasonable. • In summary, the Trust and Delegate would like to understand the Hollywood Application and be comforted that the reviewing authority considers and determines the Hollywood Application with full knowledge and consideration of the consequences of further expansion of Hollywood for the local area and beyond. This includes, for example, considering; additional congestion and parking on the local community streets, major roads and access points affecting the local community and the Cities of Nedlands and Perth; potential additional burden on public infrastructure in the area; consequences for access to the local precinct; the implications of approval of the Hollywood Application and proposed expansion may have on the wider planning strategies for the area (business and residential), including for QEIIMC development and expansion potential. • A number of variances have been noted between the Proposed Development Application and the Master Plan for the Hollywood Private Hospital (HPH) Part 1 (the Current Master Plan), prepared for Ramsay Health Care by Landvision in July 2013. These include the following: <ul style="list-style-type: none"> ○ The location of the Proposed Development varies from the Current Master Plan. The Proposed Development is located to the East of the Existing McCusker Unit, Finance and Marketing and the 30 Bed Mental Health Unit, East of the Fertility Centre, Leach Theatres and Kitchen and 	<p>Noted.</p> <p>As above. The proposed development remains consistent with the current Masterplan, particularly in reference to development intensity and car parking.</p> <p>It is also considered that the implications of the scale of the current and possible future development of the QEIIMC and any potential increase in parking far exceed those of Hollywood Hospital.</p> <p>Any future amendments to the planning framework will have due regard for the matters raised in the QEIIMC submission, but given the level of compliance with the current framework are not considered relevant to the current application.</p> <p>The location of the proposed development is generally consistent with the redevelopment areas identified in the Masterplan and consistent with Ramsay's future vision for its site. The Masterplan is policy document for the long-term redevelopment of the site, which the proposed development is consistent with, particularly</p>

	Summary of Public Submission	Applicant Response
	<p>Support Services and south of the Existing On-Grade Staff Carpark. The Current Master Plan proposes the location North-East in close proximity to the Queen Elizabeth II Medical Centre (QEIMC) Western Lot Boundary with the indicative building footprint well away from the Proposed Development. This new location results in the demolition of a number of buildings including the McCarthy Ward, Day Rehabilitation, The Fredrick Bell Ward and Furniture and Linen Store. The Proposed Development is therefore located well away from the location outlined in the Current Masterplan.</p> <ul style="list-style-type: none"> ○ The Proposed Developments floor area is approximately 4500m² at Level 1 whereas the Current Master Plan proposes a floor area of 1720sqm. Therefore, the floor area of the Proposed Development varies from the Current Master Plan. ● The Proposed Development has an RL to the highest point of the development at RL 36.626 whereas the Current Masterplan proposes an RL of 35.000. This equates to an increase above the Current Masterplan of 1.626m. Therefore, the permitted height of the Proposed Development varies from the Current Master Plan; ● It is noted the Proposed Development will need to be submitted to WAPC for an increase in the Parking Cap due to an increase in parking spaces beyond the limit imposed on the site. <i>[includes relevant extract from Master Plan]</i>. 	<p>regarding key elements such as parking, height and setbacks. It is difficult to understand the impact of the proposed development on QEIMC given it is compliant with parking, and height and is setback some 65 metres from the QEIMC lot boundary.</p> <p>The height of the proposed development is a storey under the maximum height envisaged for the area under the Master Plan and has no impact on the amenity of QEIMC. It is also noted that part of the new development is within an area identified for a WH of 39.45 which the development is below.</p> <p>This statement is incorrect, but in any event is no longer applicable. Please refer to response to submission no. 1.</p>

	Summary of Public Submission	Applicant Response
	<ul style="list-style-type: none"> • Due to the information being available for public comment, the QEIMC Trust would like clarification on a number of queries as listed below: <ul style="list-style-type: none"> ○ Proposed Vehicle Access and Egress to and from the Proposed Development under the Current Master Plan is via Monash Avenue with Service Access provided by Verdun Street to the Northern Lot Boundary in two locations to the North-West and North. The Proposed Development Application provides access from Monash Avenue with egress shown from the two designated locations outlined under the Current Master Plan. Can the City confirm if these two access points are to be service access only or provided as access to the Proposed Development? And if this is the case has the Applicant considered the impact to Verdun Street for surrounding neighbours? ○ Can the City confirm if a Traffic Impact Assessment has been undertaken as part of the Proposed Development Application? If this has been prepared, it is requested that a copy be provided to the QEIMC Trust and relevant neighbouring properties impacted by the increased traffic to provide comment. ○ Can the City confirm if the Proposed Development has any future impact on the surrounding road network? ○ Can the City confirm if the TIS prepared as part of the Development Application incorporates the recent vehicle increase and future increase to developments under construction to the south of HPH? 	<p>Please refer to response to submission no. 3.</p> <p>A TIA has been prepared and reviewed by the City's traffic consultant.</p> <p>Refer above.</p> <p>The TIA includes traffic volumes supplied by MRWA on 24 June 2018 using the latest available information at the time of preparation and has regard for future traffic based on compliance with the current QEII parking caps.</p>

	Summary of Public Submission	Applicant Response
	<ul style="list-style-type: none"> ○ Can the City confirm if a Planning Report been undertaken as part of the Proposed Development Application; and if so can this be issued for review to enable both the QEIIMC Trust and the surrounding neighbours to make an appropriate comment? ○ As outlined under the Current Master Plan section 6.4.2, Future Access and Parking, a small percentage of the parking will be retained at grade, primarily along Monash Avenue. Can the City confirm, will the Applicant be removing all current on-grade staff parking located north of the proposed development and other on-grade parking in line with the aspirations of the current Masterplan? ● Can the City confirm whether there are any future provisions for parking proposed on the HPH site other than those listed above? ● As noted in this letter (Items 1 to 4) there are a number of variances between the Proposed Development and the Master Plan. Will the City be proposing that HPH undertake a redesign of the Current Master Plan as the Proposed Development varies greatly from the Current Master Plan as outlined in Items 1 to 4? 	<p>The proposed development plans were made available for comment as required by the City's Policy.</p> <p>No the application does not involve the removal of bays along Monash Avenue The development represents one stage of the future redevelopment of the site and complies with the parking requirements of the Masterplan.</p> <p>Parking is set by the Scheme with due regard held for the approved Masterplan.</p> <p>The proposed development does not vary significantly from the current Masterplan, particularly as it relates to indicative future development zones and the intended type and intensity of development. Whilst the Draft City of Nedlands Scheme No. 3 was not endorsed by the Council, it is noted that it no longer referenced the Masterplan.</p> <p>Ramsay will be working with the City to ensure that an appropriate planning framework is in place for the consideration of new applications lodged and considered pursuant to Scheme No. 3.</p>
11	<p>Comment</p> <ul style="list-style-type: none"> ● Multi story car park at no. 95 Consultancy Suite is underutilised and could be better publicised and parking outside no. 95 entrance not 'user friendly'. Infers proposed development will increase this issue. 	<p>Noted. Ramsay will give consideration to the preparation of a way finding and signage strategy.</p>

	Summary of Public Submission	Applicant Response
	<ul style="list-style-type: none"> • Verdun Street access used by staff and service personnel should also be for visitors. • Neither entrances on Verdun St would appear to be used routinely by many staff and deliveries. It is not uncommon for the early morning deliveries namely 5:30am onwards to enter the Hospital grounds from Monash Avenue and likewise staff. In the afternoon and night, exits onto Monash Avenue are used by staff at the end of their shift. • Vehicular movement within the Hospital grounds needs improvement. The thought of even 130 additional cars (1/2 of the 260 parking bays) entering and exiting is not satisfactory. 	<p>Access to Verdun Street is currently limited due to amenity issues for local residents. Refer to response to previous submissions.</p>
12	<p>Comment</p> <ul style="list-style-type: none"> • Concern over reduction in property prices being contributed to by the various development proposals, continuing construction, associated traffic and noise pollution. • Key concern is the likely increased traffic along Verdun Street, both during the construction period (with heavy trucks, that, we understand, will need to back into Lupin Hill Grove in order to be able to access the building site); as well as subsequently with the planned 1,959 car parks. Impact of traffic on residences and Hollywood Primary School, including safety concerns over speed for children walking to school. • All traffic entering the construction site should be via Aberdare Rd to Gairdner Ave to avoid nearby residences. It would also need to be supported by ensuring that overflow parking does not impact on the area and the Hollywood Bowls car park. 	<p>Noted. Impact on property values are not a valid planning consideration. Amenity impacts associated with construction to be addressed by CMP as a condition of development approval.</p> <p>Please refer to response to submission No. 3. Note car bays on-site is now 1,784.</p>

	Summary of Public Submission	Applicant Response
	<ul style="list-style-type: none"> • However, thought should also be had to the impact of the additional car parks and potential increase in traffic once construction is complete; entry to the medical centre car park should be limited from the roads where the hospital fronts – i.e. Monash or Hospital Avenue - rather than from the back of the hospital from Verdun Street. • It is very disappointing in general that planning, and development seems to be directed to building more carparks and increasing traffic and congestion through formerly quiet residential areas; while at the same time, the bus routes 24 and 25, which support access to the QE2 Medical centre, have just had their daily schedules reduced. Having infrastructure lagging behind development is not good planning. 	<p>Please refer to response to submission No. 2.</p> <p>Noted. Ramsay supports the increase of public transport services to the site and the QEII MC.</p>
13	<p>Comment</p> <ul style="list-style-type: none"> • Concern over construction traffic on Verdun Street, including impacts of large truck on safety (speed and time of day for movements), and anecdotally cracking in the internal plaster walls of their properties. • Concern over cars parking on Verdun Street verge outside the Volleyball area even though it clearly states, 'No Verge Parking', including safety of reversing movements with truck through-movements. • All traffic entering the construction site should be via Aberdare Rd to Gairdner Ave to avoid nearby residences. Vehicles could enter the site near Ramsey Health Plus, almost opposite Kitchener Street, which would simply mean removing part of the wire fence, possibly about 100 metres, along with a few small shrubs. It would allow ample room for all vehicles, especially large trucks to easily access the site and allow 	<p>Noted. Please refer to response to submission No. 2 & 3.</p>

	Summary of Public Submission	Applicant Response
	a smooth flowing exit as well, all carried out in a safe manner.	
14	<p>Comment</p> <p>Local sporting club seeks assurance that sufficient parking is provided for construction workers, visitors and staff at the proposed development so that there is no reduction in availability of parking for club users.</p>	<p>Noted. Please refer to response to submission No. 3.</p>

Our Ref: 717-356

20 April 2018

The Secretary
Western Australian Planning Commission
Locked Bag 2506
PERTH WA 6001

Attention: Lisa Powell, A/Director Land Use Planning

Dear Lisa,

**LOTS 562-564 MONASH AVENUE, NEDLANDS – RAMSAY HOLLYWOOD HOSPITAL -
UWA-QEII SPECIALISED ACTIVITY CENTRE PLAN (PRECINCT-BASED APPROACH)**

On behalf of Ramsay Health Care (Ramsay), **element** seeks the Western Australian Planning Commission (WAPC)'s endorsement to prepare an activity centre plan (ACP) for the part of the UWA-QEII Specialised Activity Centre covered just by the Hollywood Private Hospital site (the subject site) to replace the 'Master Plan' currently adopted by the City of Nedlands (City).

Background

- The subject site is identified under State Planning Policy 4.2 (SPP 4.2) and the Central Sub-Precinct Planning Framework as part of the wider UWA-QEII Specialised Activity Centre, which is an area requiring the preparation of an ACP.
- The activity centre extends both north and south of Stirling Highway, covering an area of approximately 190 hectares and comprising major educational, commercial, retail, residential and health precincts.
- An existing Master Plan – approved by the City of Nedlands (City) Council in 2013 - currently guides the redevelopment of the site and is referenced within the City's Town Planning Scheme No. 2.
- The City's draft Local Planning Scheme No. 3 (LPS3) does not contain any development guidance or controls and will effectively rely on an ACP in this regard.
- The adjoining QEII site to the east is currently undergoing a master planning process which is expected to address matters such as infrastructure and connection to and from the site and its relationship with surrounding land uses.
- The existing Master Plan for the Hollywood Private Hospital site is now over five years old and requires re-evaluation in the context of changes made to the State strategic and regulatory planning frameworks since, and it is considered that a precinct-based ACP is the

most appropriate mechanism to guide its future redevelopment.

About Ramsay

Ramsay is a leading and respected provider of health care services throughout Australia and its international market. Ramsay's facilities, including the Hollywood Private Hospital, cater for a broad range of health care needs including day procedures, complex surgery, pathology, radiology, allied health services and rehabilitation. Ramsay's values are centered around 'people caring for people' and are committed to ongoing improvement of patient care in all areas to ensure Ramsay remains at the forefront of health care delivery.

Whilst the Hospital has been there since 1947, Ramsay has been part of the Nedlands community for over 24 years and has embarked on a significant investment programme to ensure that the wider community is provided with the highest quality of service possible. With the now Regis Aged Care site opposite, an aging community and a growing population, the need for good quality health care in the local community is increasing. It is essential that Ramsay gain as much certainty as possible around the planning framework so it continues to invest in its asset and provide the best health care possible.

The Subject Site

The subject site is described as 95-101 Monash Avenue, Nedlands. The site is bound by the QEII Medical Centre to the east, Monash Avenue to the south (and Regis Hollywood beyond), Verdun Street to the north (and largely single residential housing beyond) and Hollywood Primary School and recreational space to the west.

The following table summarises the particulars of the Certificates of Title.

Lot	Plan/ Diagram	Vol/Fol	Area (ha)
564	P63425	2735/137	10.6158
562	D95434	Multiple/ Strata'd	0.6621
563	P63425	Multiple/ Strata'd	0.4600

Proposal: Request for Precinct-Based ACP

We firstly seek the WAPC's support under clause 30(b) of the *Deemed Provisions of the Planning and Development (Local Planning Schemes) Regulations 2015* for the proposed ACP boundary to apply to the Ramsay Hollywood Hospital site only, as shown on the attached plan (Attachment A).

NB: we are not requesting the UWA-QEII Specialised Activity Centre boundary be amended.

Secondly, clause 32(1)(c) of the *Deemed Provisions* state "unless the Commission otherwise agrees" when referring to the parameters that should be addressed by an ACP. We therefore seek the WAPC's endorsement that the Hollywood Private Hospital ACP addresses the following key parameters (adapted from clause 32(1)(c)):

- **Vision and Goals:** The long-term vision for the site and key goals or objectives that will guide implementation;
- **Key attributes and planning context:** A site analysis including topography, existing development and precinct context;
- **Extent to which the ACP provides for health related land uses:** Estimates of the future number of hospital beds and type of health services covered by the plan.
- **Transport:** Coordination of key transport links with the existing surrounding network including the key pedestrian and cycling movement network, and provision for car parking;
- **Staging of development:** Broad stage boundaries and requirements for each stage, if relevant;

- **Built form:** Built form objectives and requirements, including zones of maximum building heights, setbacks etc.;
- **Servicing:** Arrangements to manage serving the development(s); and
- **Access:** Arrangements for vehicles, including emergency vehicles, to access the area covered by the plan, including parking provisions.

We note the Beckenham Station Precinct staged ACP has taken a similar approach to ensure the orderly and proper planning of a unique site.

Discussion

Planning framework

The site is identified as part of the wider UWA-QEII Specialised Activity Centre under State Planning Policy 4.2 (SPP 4.2) and the Central Sub-Precinct Planning Framework. We appreciate activity centres are areas intended for higher intensity land use and development which may be guided through the preparation of an Activity Centre Plan.

Given that approval of all ACP’s is granted by the WAPC having regard to the ACP’s context and integration with surrounding areas, it is considered that the proposed precinct-based ACP will facilitate a coordinated and orderly approach to planning for the future redevelopment of the Hollywood Private Hospital site, without prejudicing the planning of the wider UWA-QEII Specialised Activity Centre.

The QEII site is currently undergoing a master planning process to update the existing QEII Master Plan. As part of the Hollywood Private Hospital site ACP we would seek to illustrate key pedestrian linkages as well as enabling future vehicular connects via a peripheral road network.

It is noted the City’s draft LPS3 (as advertised) identifies the site within a Special Use zone as follows:

No.	Description of land	Special use	Conditions
SU1	Hollywood Hospital	(i) Hospital (ii) Other uses associated with the Hospital are permitted provided they are “I” incidental uses.	(1) All development and uses are to be consistent and not detrimental to the primary function of the area being medical and hospital related.

Draft SU1 requires all development to be consistent and not detrimental to the primary function of the area being medical and hospital related. It does not, however, provide any development parameters and therefore lacks certainty for development occurring at the site. It is considered that the preparation of an ACP for the site, containing built form standards as mentioned above, can provide the level of certainty - and flexibility - required for the ongoing redevelopment of the Hollywood Private Hospital site.

City of Nedlands Support of Proposal

The redevelopment of the Ramsay Hollywood Hospital site has been in the planning phase for some time now. Throughout this time Ramsay and **element** have been in contact with the City of Nedlands, who support the proposed precinct-based ACP for the site. Refer to Attachment B – Correspondence from City of Nedlands confirming in-principle support.

Concluding Comments

Ramsay is committed to the ongoing improvement of its health services provided to patients at its Hollywood Private Hospital, Nedlands, but requires certainty around the planning framework in order to protect its long term investment in providing quality private health care. The local planning framework is considered to guide its redevelopment and improved service offering at the site, which will only be enhanced through an activity centre plan that can continue the legacy of the approved master plan.

Western Australian Planning Commission
LOTS 562-564 MONASH AVENUE, NEDLANDS – RAMSAY HOLLYWOOD HOSPITAL - UWA-
QEII SPECIALISED ACTIVITY CENTRE PLAN (PRECINCT-BASED APPROACH)

element.

In light of the above, and with the City's support, **element** respectfully requests endorsement from the WAPC for the proposed sub-precinct approach and parameters for the preparation of the UWA-QEII specialised activity centre plan as it relates to the Hollywood Private Hospital site only. Should you have any queries or require clarification in regard to the above matter, please do not hesitate to contact the undersigned on 9289 8300.

Yours sincerely

element



David Read

Director

Cc – Alex Belasctro, Australian Business Development Manager, Ramsay Health Care; and
Jennifer Heyes, City of Nedlands

Enc:

- Attachment A – Proposed extent of ACP
- Attachment B – Correspondence from City of Nedlands confirming in-principle support

Your Ref: 717-356

8 May 2018

Attn: David Read
Element Advisory Pty Ltd
Level 18, 191 St Georges Terrace
PERTH WA 6000

Dear David,

Hollywood Hospital - Lots 562-564 Monash Avenue, Nedlands – Activity Centre Plan

Thank you for your email dated 23 April 2018 outlining the proposal for an Activity Centre Plan covering the Hollywood Private Hospital site at Lots 562-564 Monash Avenue, Nedlands.

The City provides in-principle support for the preparation of an Activity Centre Plan over the subject site as a precinct-based approach, in lieu of the site being encompassed within an Activity Centre Plan for the whole UWA-QEII Specialised Centre.

Council adopted draft Local Planning Scheme No. 3 at a Special Council meeting held on 13 December 2016. The Scheme proposed a Special Use zone over the subject site with the following provision under Table 6 stating *“The City reserves the right to request a Local Development Plan for any redevelopment, substantial addition, change of use or modification, as the City deems necessary.”*

Although, this provision was removed by the Western Australian Planning Commission modifications prior to the Scheme being advertised, it was accepted by Council at the time of adoption that a Local Development Plan (or similar) would be appropriate for this site. Therefore, provided the separate Activity Centre Plan for this site considers the remainder of the Activity Centre area, it is supported in-principle.

Should you have any queries or require clarification in regard to the above, please don't hesitate to contact Aron Holbrook, Coordinator Strategic Planning on AHolbrook@nedlands.wa.gov.au or 92733500.

Yours sincerely,



Peter Mickleson
Director Planning & Development

From: [Marchbank, Katina](#)
To: [Alison Healey](#); david.read@elementwa.com.au
Cc: [Andrew Bratley](#)
Subject: Preliminary Feedback - Request for ACP for Hollywood Private Hospital
Date: Tuesday, 29 May 2018 1:32:32 PM
Attachments: [image001.png](#)

Hi David and Alison,

I refer to your letter dated 9 May 2018 seeking WAPC endorsement to prepare an activity centre plan for the Hollywood Private Hospital.

The request has been assessed and discussed at senior officer level at DPLH. The purpose of this email is to convey the preliminary feedback prior to finalising a recommendation for the WAPC consideration.

In our view an ACP for the Hollywood Private Hospital site is not the most appropriate mechanism because the site is part of the UWA-QEII specialised activity centre (SAC) identified in SPP4.2 and the Central Sub-regional Planning Framework. SPP4.2 provides that a structure plan should cover the whole of the activity centre boundary. It is noted the DPLH are in the preliminary stages of coordinating an ACSP for the UWA-QEII SAC, which is intended to be done in collaboration with the relevant stakeholders, including integrating the master planning processes underway (at various stages) by UWA and QEII.

However, the aim of the proposed ACP to address built form objectives and requirements (such as building heights and setbacks) in the context of the existing development, site servicing, access and parking is supported. With reference to Clause 46 – 47 of the deemed provisions, it is considered a Local Development Plan is more appropriate.

We are considering a recommendation to seek WAPC agreement that a Local Development Plan for the Hollywood Private Hospital site is required for the purpose of orderly and proper planning to facilitate future development.

Please let me know your comments about the above. If you would like to discuss anything in detail, we are more than happy to meet.

Kind regards,

Katina Marchbank | Principal Planning Officer | Land Use Planning
140 William Street, Perth WA 6000
6551 9568 |
www.dplh.wa.gov.au



The department acknowledges the Aboriginal peoples of Western Australia as the traditional custodians of this land and we pay our respects to their Elders, past and present.

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14. Elected Members Notices of Motions of Which Previous Notice Has Been Given

Disclaimer: Where administration has provided any assistance with the framing and/or wording of any motion/amendment to a Councillor who has advised their intention to move it, the assistance has been provided on an impartial basis. The principle and intention expressed in any motion/amendment is solely that of the intended mover and not that of the officer/officers providing the assistance. Under no circumstances is it to be expressed to any party that administration or any Council officer holds a view on this motion other than that expressed in an official written or verbal report by Administration to the Council meeting considering the motion.

Nil.

15. Elected members notices of motion given at the meeting for consideration at the following ordinary meeting on 23 October 2018

Disclaimer: Where administration has provided any assistance with the framing and/or wording of any motion/amendment to a Councillor who has advised their intention to move it, the assistance has been provided on an impartial basis. The principle and intention expressed in any motion/amendment is solely that of the intended mover and not that of the officer/officers providing the assistance. Under no circumstances is it to be expressed to any party that administration or any Council officer holds a view on this motion other than that expressed in an official written or verbal report by Administration to the Council meeting considering the motion.

Notices of motion for consideration at the Council Meeting to be held on 23 October 2018 to be tabled at this point in accordance with Clause 3.9(2) of Council's Local Law Relating to Standing Orders.

Nil.

16. Urgent Business Approved By the Presiding Member or By Decision

Nil.

17. Confidential Items

Nil.

Declaration of Closure

There being no further business, the Presiding Member declared the meeting closed at 10.27 pm.